

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
**UTU-66421**

6. If Indian, Allottee or Tribe Name  
**NA**

7. If Unit or CA Agreement, Name and No.  
**NA**

8. Lease Name and Well No.  
**Federal H 34-30**

9. API Well No.  
**43-047-38883**

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator  
**Summit Operating LLC**

3a. Address **P.O. Box 683909 Park City UT, 84068**

3b. Phone No. (include area code)  
**435-940-9001**

4. Location of Well (Report location clearly and in accordance with any State requirements.)  
At surface **649234602' FSL & 2088' FEL SW 1/4 S/E 1/4 39.914339**  
At proposed prod. zone **same as above 44194994 - 109.253949**

10. Field and Pool, or Exploratory  
**Natural Buttes**

11. Sec., T. R. M. or Blk. and Survey or Area  
**Sec. 30, T10S. R24E**

14. Distance in miles and direction from nearest town or post office\*  
**Approximately 65.8 miles in a southeasterly direction from Vernal UT**

12. County or Parish  
**Uintah**

13. State  
**UT**

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  
**602'**

16. No. of acres in lease  
**2,240 Acres**

17. Spacing Unit dedicated to this well  
**40 Acres**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
**1,600'**

19. Proposed Depth  
**7,100'**

20. BLM/BIA Bond No. on file  
**UTB-000014**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**5,312 GR**

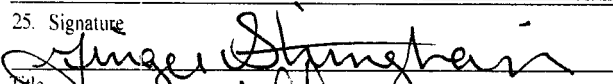
22. Approximate date work will start\*  
**12/01/2006**

23. Estimated duration  
**30 Days**

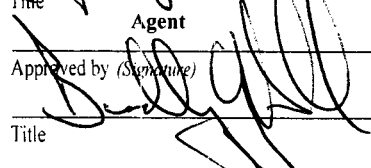
24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature  Name (Printed Typed) **Ginger Stringham** Date **02/16/2007**

Title **Agent**

Approved by (Signature)  Name (Printed Typed) **BRADLEY G. HILL** Date **03-01-07**

Title **ENVIRONMENTAL MANAGER**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

Federal Approval of this  
Action is Necessary

RECEIVED

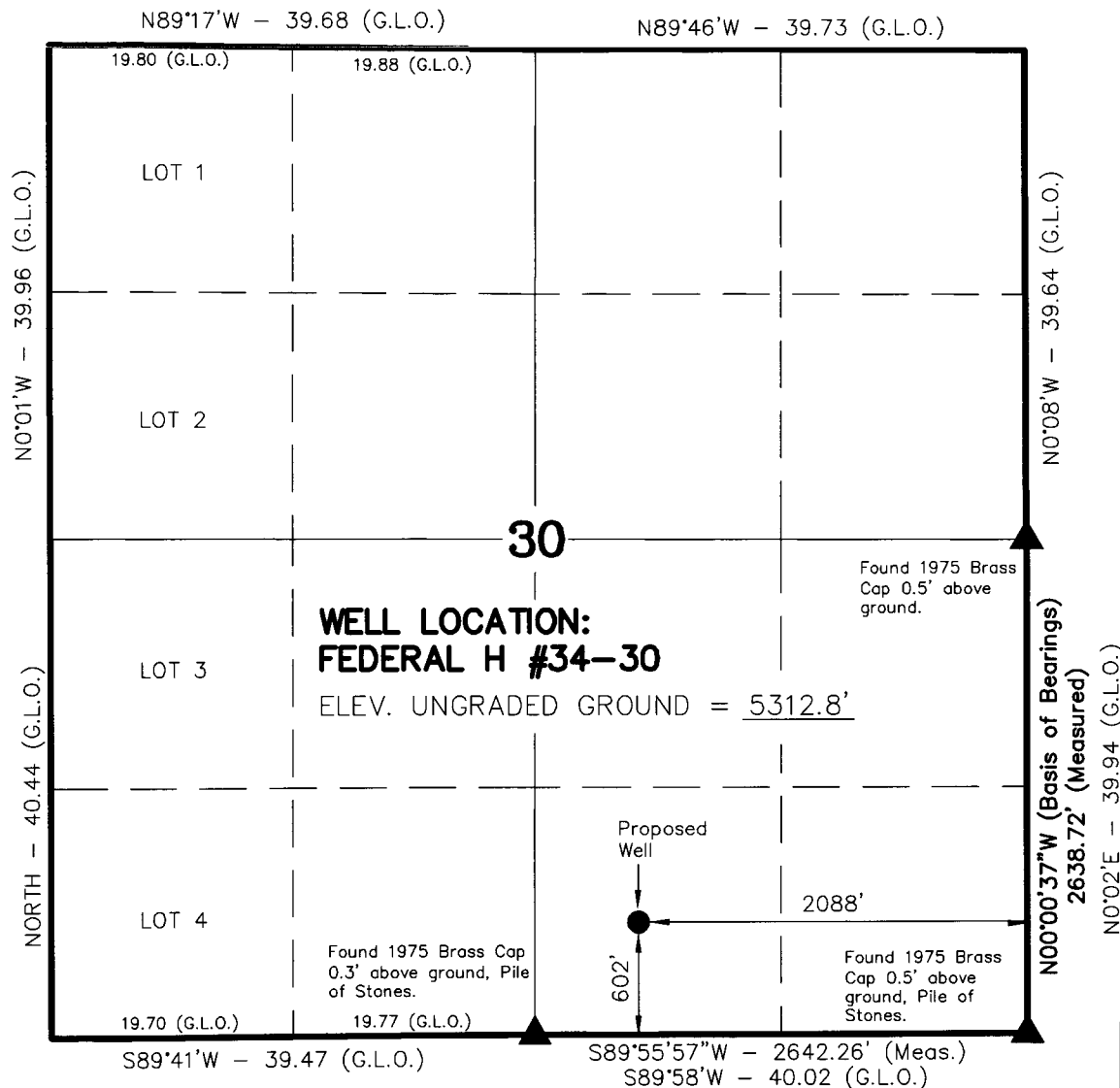
FEB 22 2007

DIV. OF OIL, GAS & MINING

# T10S, R24E, S.L.B.&M.

SUMMIT OPERATING, LLC

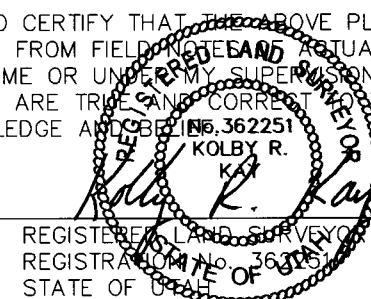
WELL LOCATION, FEDERAL H #34-30,  
LOCATED AS SHOWN IN THE SW 1/4  
SE 1/4 OF SECTION 30, T10S, R24E,  
S.L.B.&M UTAH COUNTY, UTAH.



## NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES AND ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF.



## TIMBERLINE LAND SURVEYING, INC.

38 WEST 100 NORTH. - VERNAL, UTAH 84078  
(435) 789-1365

DATE SURVEYED: 10-26-06	SURVEYED BY: B.J.S.	SHEET 2 OF 10
DATE DRAWN: 10-27-06	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised: 02-12-07	

**FEDERAL H #34-30**  
**(Proposed Well Head)**  
**NAD 83 Autonomous**  
LATITUDE = 39° 54' 51.80"  
LONGITUDE = 109° 15' 17.23"

▲ = SECTION CORNERS LOCATED  
BASIS OF ELEVATION IS BENCH MARK 87 EAM 1965  
LOCATED IN THE SE 1/4 SW 1/4 OF SECTION 1,  
T12S, R23E, S.L.B.&M. THE ELEVATION OF THIS  
BENCH MARK IS SHOWN ON THE ARCHY BENCH SE  
7.5 MIN. QUADRANGLE AS BEING 5887'.

**Ten Point Plan**

**Summit Operating LLC**

**Federal H #34-30**

**Surface Location SW  $\frac{1}{4}$  SE  $\frac{1}{4}$ ,**

**Section 30, T10S. R24E.**

1. **Surface Formation**  
**Green River**

2. **Estimated Formation Tops and Datum:**

Formation		Depth	Subsea
Green River		Surface	+5,312' G.R.
Wasatch	Oil/Gas	2,580'	+2,732'
Mesa Verde	Oil/Gas	4,480'	+ 832'
Mancos	Oil/Gas	6,300'	- 988'
TD		7,100'	-1,788'

All fresh water prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

3. **Producing Formation Depth:**

Objective Formations include the Wasatch 2,580' - 4,480', Mesa Verde 4,480' - 6,300' and the Mancos 6,300' - 7,100'.

4. **Proposed Casing:**

Hole Size	Casing Size	Weight/FT	Grade	Coupling & Tread	Casing Depth	New/Used
17 1/4	13 3/8	61#	N-80	ST&C	300'	NEW
12 1/4	8 5/8	24#	N-80	ST&C	2,500'	NEW
7 7/8	4 1/2	11.6#	N-80	LT&C	7,100'	NEW

**Cement Program:**

**Surface casing will be cemented as follows from 0'-300':**

**Note: Cement Volume = Gauge hole + 50%**

Casing Size	Cement Type	Cement Amounts	Cement Yield	Water Mix	Cement Weight
Lead:					
13 3/8"	Class "G"	360 sks +/-	1.18ft <sup>3</sup> /sk	5	15.6 ppg
	6 bag mix ready mix				



**Intermediate casing will be cemented as follows from 0'- 2,500':**

**Cement volume = Gauge hole + 50%**

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead: 8 5/8"	Premium "5" 16% Gel 10#/sk Gilsonite 3% Salt 3#/sk GB3 0.25#/sk Flocele	700 sks. +/-	3.82ft <sup>3</sup> /sk	23	11.0 ppg

**Production casing will be cemented as follows from 2,380'- 7,100':**

**Note: Lead should be 200' above the Wasatch.**

**Cement volume = Gauge hole + 25%**

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead: 4 1/2"	Premium "5" 16% Gel 10#/sk Gilsonite 3% Salt 3#/sk GB3 0.25#/sk flocele	920 sks. +/-	3.82ft <sup>3</sup> /sk	23	11.0 ppg

**5. BOP and Pressure Containment Data:**

A 3000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 13 3/8" surface casing. An upper kelly cock to the required pressure rating with a handle available shall be employed.

The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

**6. Mud Program:**

<u>Interval</u>	<u>Mud weight lbs./gal.</u>	<u>Viscosity Sec./OT.</u>	<u>Fluid Loss Ml/30 Mins.</u>	<u>Mud Type</u>
0-2,300	Air/Clear Water	-----	No Control	Water/Gel
2,300-T.D.	8.4-12.0	30-45	8-10	LSND
water based mud system				

**Note:** Mud weights may exceed 12.0 due to solids increasing at or near T.D. Increased weights are not required to control formation pressure. Operator will have on location sufficient mud and weight material to increase mud weight to 12.0 at any time while drilling the subject well. Visual mud monitoring incorporating pit level indicators shall be used.

**7. Testing, Coring, Sampling and Logging:**

- a) DST: None are anticipated.
- b) Coring: There is the possibility of sidewall coring.
- c) Mud Sampling: Every 10' from 2,300' to T.D.
- d) Logging:

Type	Interval
DLL/SFL W/GR and SP	T.D. to Surf. Csg
FDC/CNL W/GR and CAL	T.D. to Surf. Csg

**8. Abnormalities (including sour gas)**

Anticipated bottom hole pressure will be less than 3000 psi. No abnormal pressures, temperatures or other hazards are anticipated. Other wells drilled in the area have not encountered over pressured zones or H<sub>2</sub>S.

**9. Other facets of the proposed operation:**

**Off set well information:**

**Producing Wells:**

**FED H 21-31**

**FED H 12-30**

**Shut in Wells:**

**FED H 14-30**

**10. Drilling Schedule:**

The anticipated starting date is upon approval. Duration of operations is expected to be 30 days.

13. Lessees or Operator's representative and certification

A) Representative

Ginger Stringham  
Paradigm Consulting  
PO BOX 790203  
Vernal, UT 84079

Office 435-789-04162  
Fax 435-789-8188  
Cellular 435-790-4163

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, onshore oil and gas orders, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval.

After permit termination, a new application will be filed for approval for any future operations.

B) Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation

proposed herein will be performed by Summit Operating, LLC and its contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for filing of a false statement.

**Onsite Dates:**

**Self Certification Statement**

**The following self-certification statement is provided per Federal requirements dated June 15, 1988.**

**Please be advised that Summit Operating, LLC is considered to be the operator of the following well:**

**Federal H #34-30  
Section 30, T. 10S, R. 24E  
SW ¼ of the SE ¼  
Lease UTU-66421  
Uintah County, Utah**

**The Summit Operating, LLC is responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.**

**Bond UTB-000014 provides state-wide bond coverage on all Federal Lands.**

Date 2-10-10

Ginger Stringham, Agent  
Paradigm Consulting

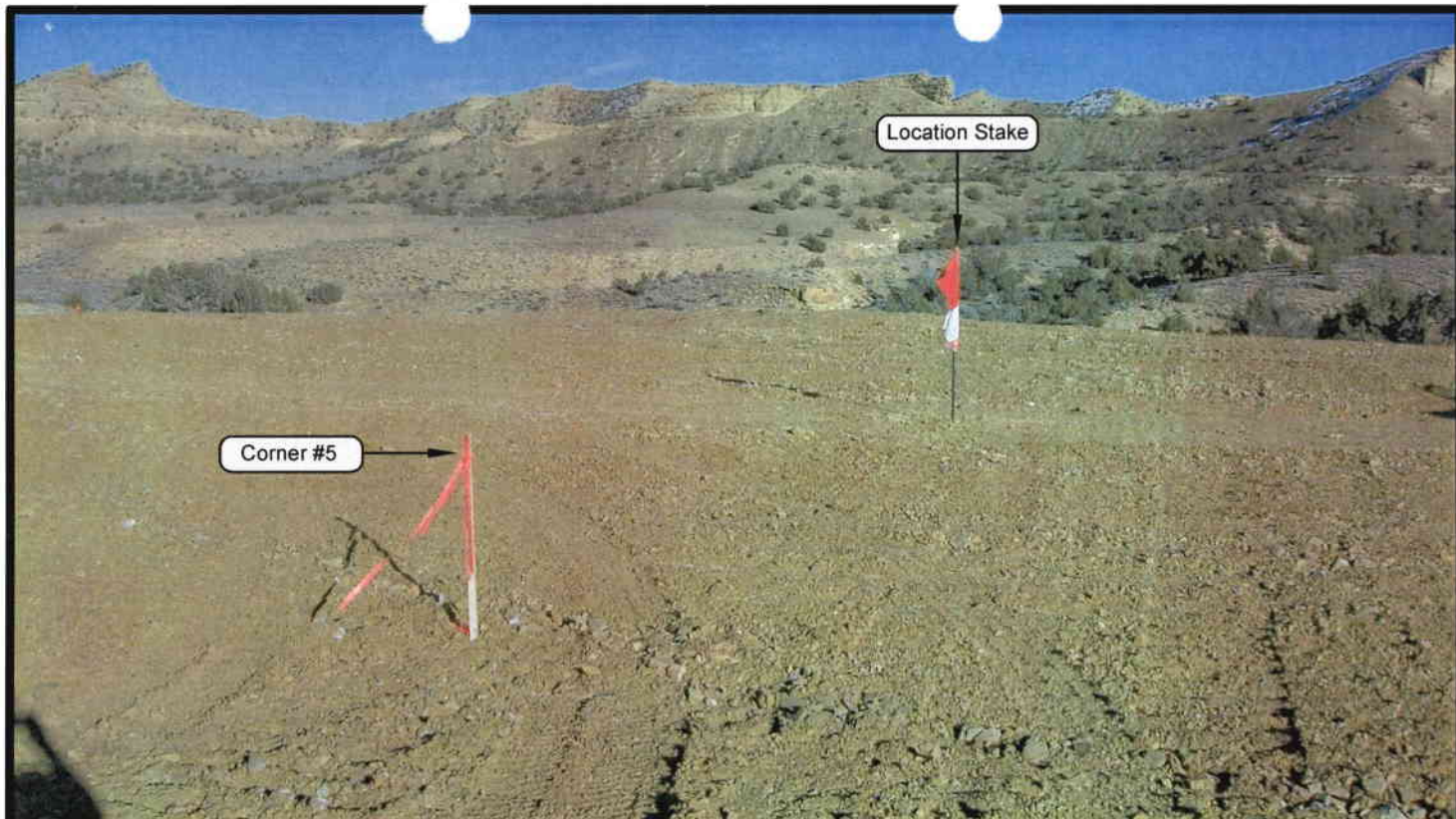


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY

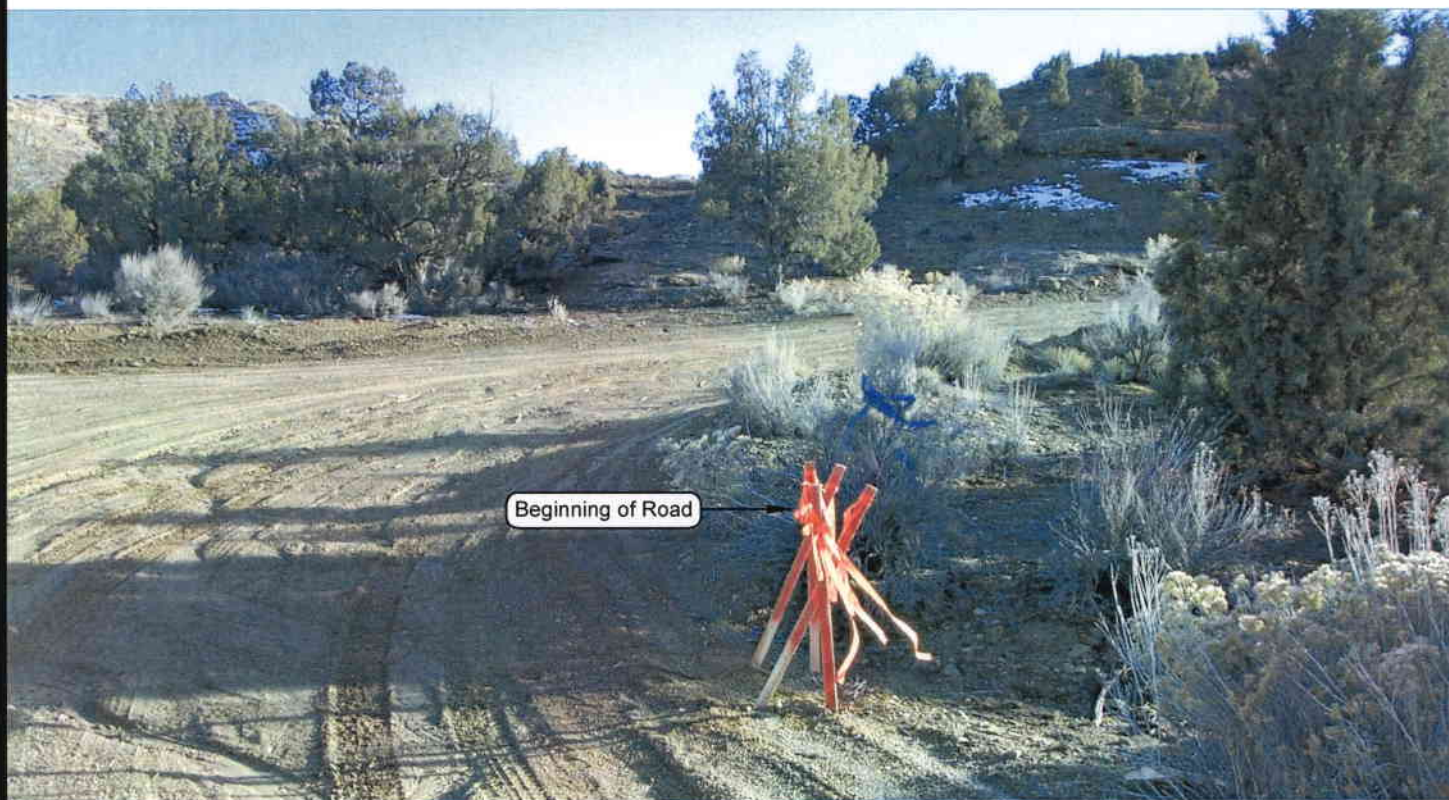


PHOTO VIEW: FROM BEGINNING OF ACCESS ROAD

CAMERA ANGLE: SOUTHWESTERLY

## SUMMIT OPERATING, LLC

**FEDERAL H #34-30**  
**SECTION 30, T10S, R24E, S.L.B.&M.**  
**602' FSL & 2088' FEL**

### LOCATION PHOTOS

TAKEN BY: B.J.S.

DRAWN BY: M.W.W.

DATE TAKEN: 10-26-06

DATE DRAWN: 10-27-06

REVISED: 02-12-07

### Timberline Land Surveying, Inc.

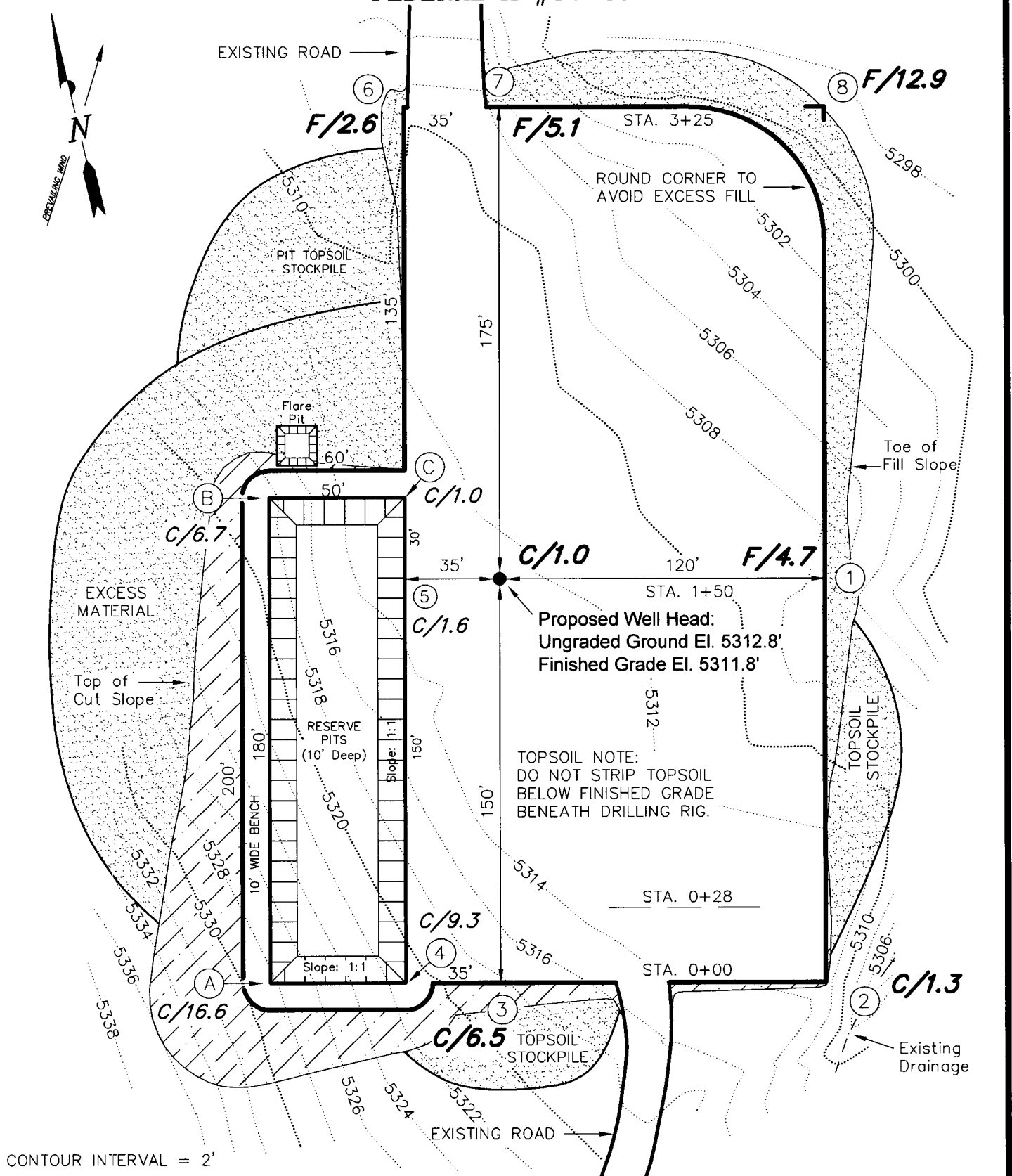
38 West 100 North Vernal, Utah 84078  
 (435) 789-1365

SHEET  
 1  
 OF 10



# SUMMIT OPERATING, LLC

## CUT SHEET FEDERAL H #34-30

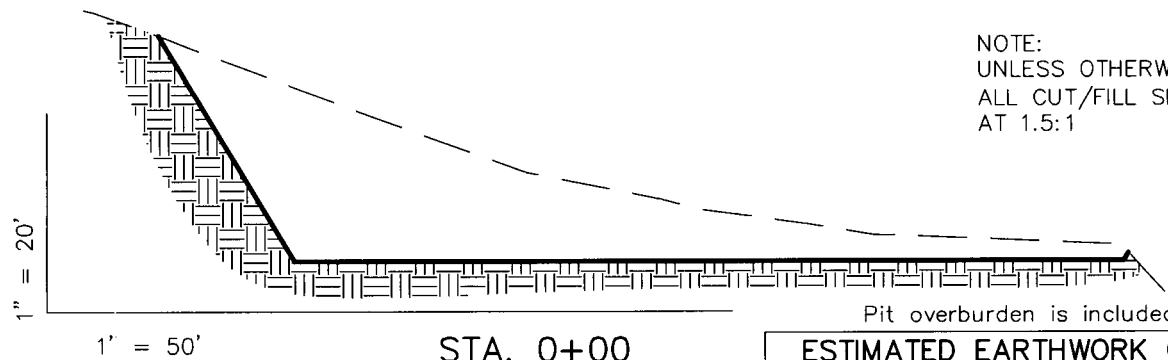
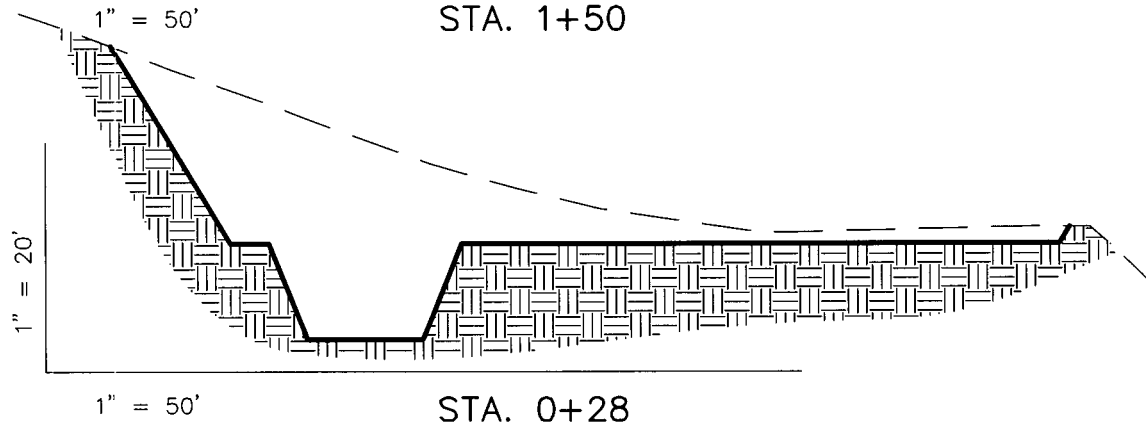
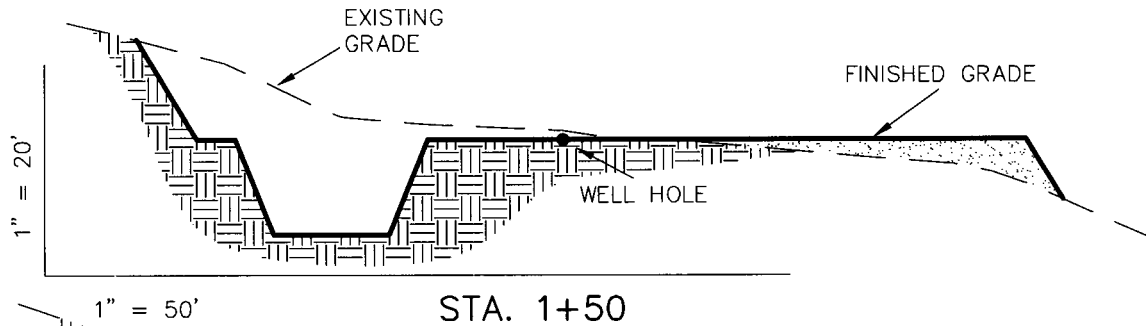
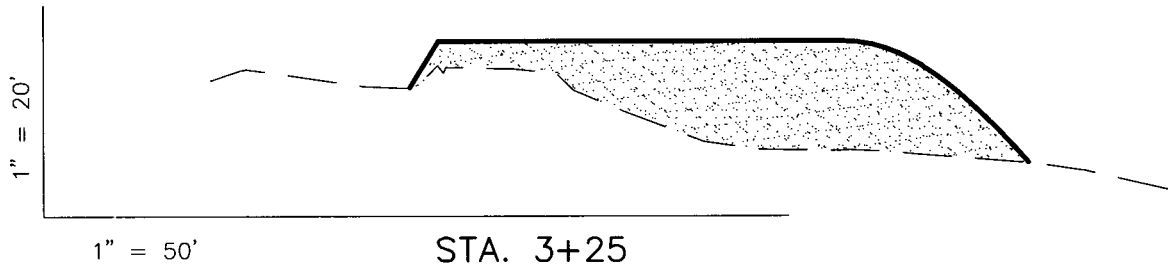


CONTOUR INTERVAL = 2'

Section 30, T10S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SE	Footage Location: 602' FSL & 2088' FEL
Date Surveyed: 10-26-06	Date Drawn: 10-27-06	Date Last Revision: 02-12-07	<b>Timberline</b> Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078 (435) 789-1365
Surveyed By: E.J.S.	Drawn By: M.W.W.	Scale: 1" = 50'	
			<b>SHEET</b> <b>3</b> <b>OF 10</b>

# SUMMIT OPERATING, LLC

## CROSS SECTIONS FEDERAL H #34-30



NOTE:  
UNLESS OTHERWISE NOTED  
ALL CUT/FILL SLOPES ARE  
AT 1.5:1

Pit overburden is included in pad cut.

### REFERENCE POINTS

170' SOUTHEASTERLY = 5297.3'  
220' SOUTHEASTERLY = 5287.1'  
200' SOUTHWESTERLY = 5321.5'  
250' SOUTHWESTERLY = 5325.1'

### ESTIMATED EARTHWORK QUANTITIES (No shrink or swell adjustments have been used) (Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	6,370	5,580	Topsoil is not included in Pad Cut	790
PIT	2,140	0		2,140
TOTALS	8,510	5,580	1,160	2,930

Excess Material after Pit Rehabilitation = 790 Cu. Yds.

Section 30, T10S, R24E, S.L.B.&M.

Qtr/Qtr Location: SW SE

Footage Location: 602' FSL & 2088' FEL

Date Surveyed:  
10-26-06

Date Drawn:  
10-27-06

Date Last Revision:  
02-12-07

Surveyed By: E.J.S.

Drawn By: M.W.W.

Scale: 1" = 50'

**Timberline**  
Land Surveying, Inc.

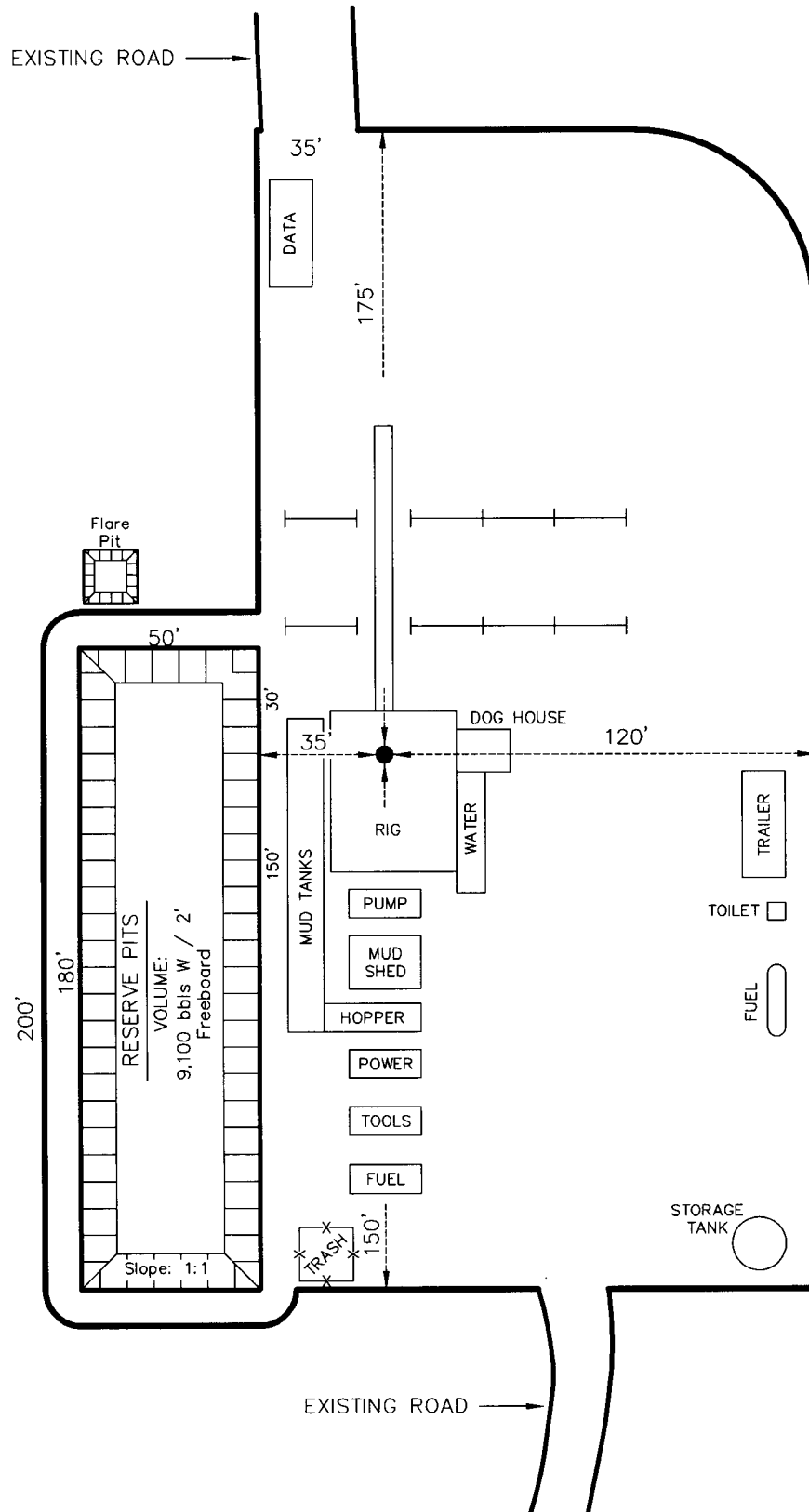
(435) 789-1365

38 WEST 100 NORTH VERNAL, UTAH 84078

**SHEET**  
**4**  
**OF 10**

# SUMMIT OPERATING, LLC

## TYPICAL RIG LAYOUT FEDERAL H #34-30

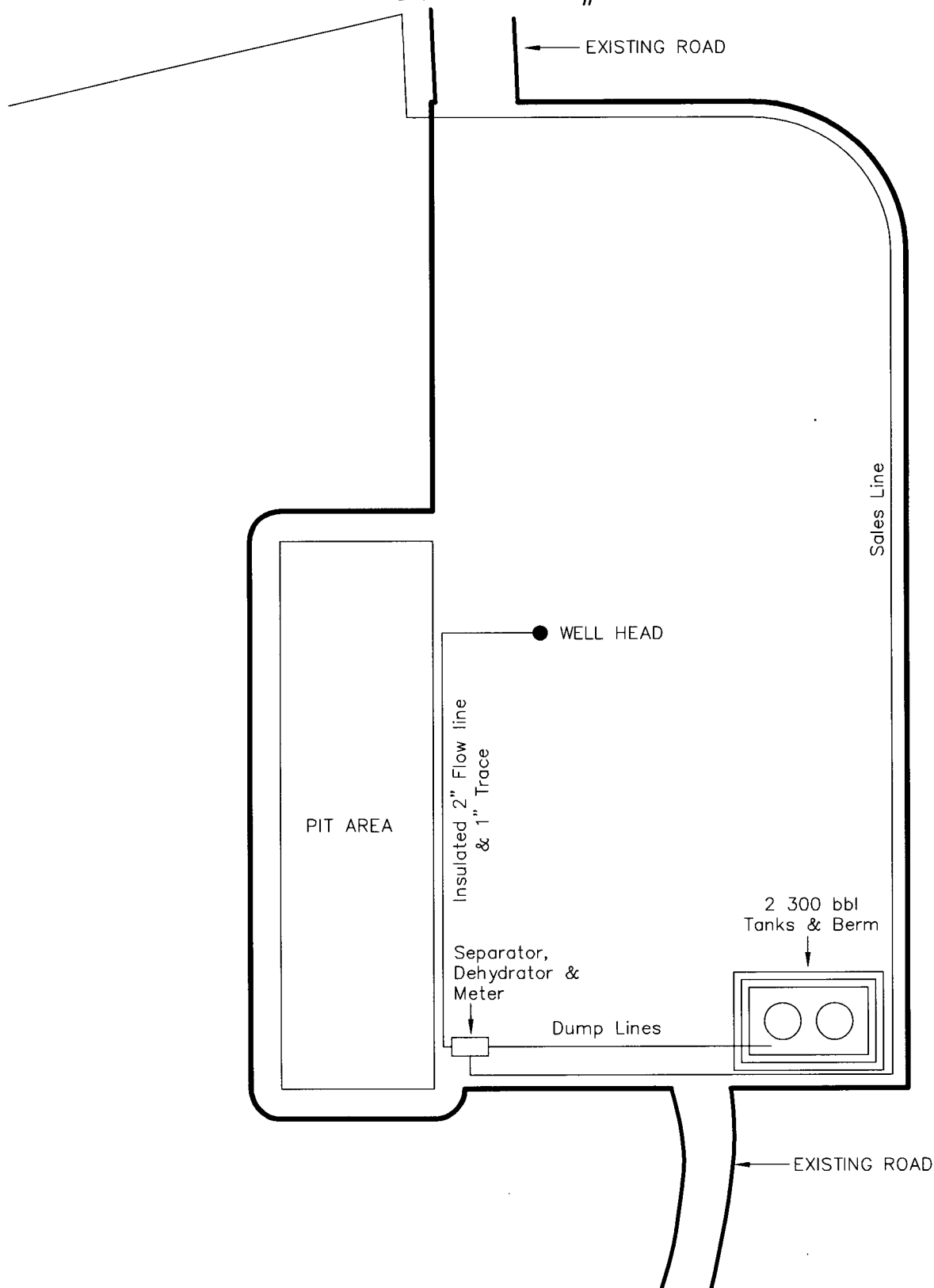


Section 30, T10S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SE	Footage Location: 602' FSL & 2088' FEL
Date Surveyed: 10-26-06	Date Drawn: 10-27-06	Date Last Revision: 02-12-07	<b>Timberline</b> (435) 789-1365
Surveyed By: E.J.S.	Drawn By: M.W.W.	Scale: 1" = 50'	<b>Land Surveying, Inc.</b>
38 WEST 100 NORTH VERNAL, UTAH 84078			<b>SHEET 5 OF 10</b>

# SUMMIT OPERATING, LLC

## TYPICAL PRODUCTION LAYOUT

### FEDERAL H #34-30



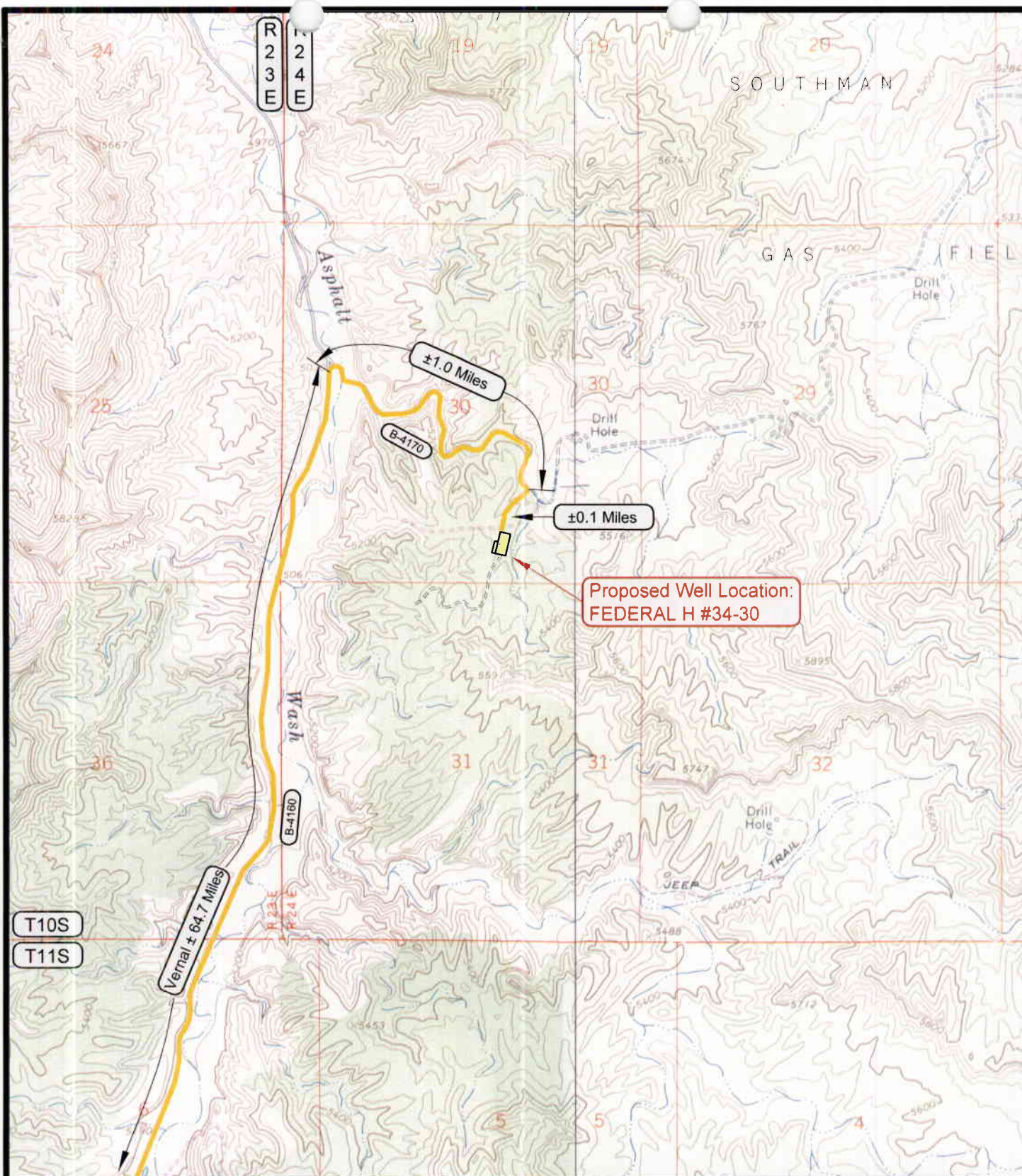
Section 30, T10S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SE	Footage Location: 602' FSL & 2088' FEL
Date Surveyed: 10-26-06	Date Drawn: 10-27-06	Date Last Revision: 02-12-07	<b>Timberline</b> (435) 789-1365 <b>Land Surveying, Inc.</b> 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: E.J.S.	Drawn By: M.W.W.	Scale: 1" = 50'	

**SHEET**  
**6**  
**OF 10**









#### LEGEND

- PROPOSED ACCESS ROAD
- = SUBJECT WELL
- = OTHER WELLS
- = EXISTING ROAD
- = EXISTING ROAD (TO BE IMPROVED)
- (B-5460) = COUNTY ROAD CLASS & NUMBER
- = LEASE LINE AND / OR PROPERTY LINE

#### TOPOGRAPHIC MAP "B"

SCALE: 1" = 2000'

DRAWN BY: A.D.F.

DATE SURVEYED: 10-26-06

DATE DRAWN: 10-27-06

REVISED: 02-12-07

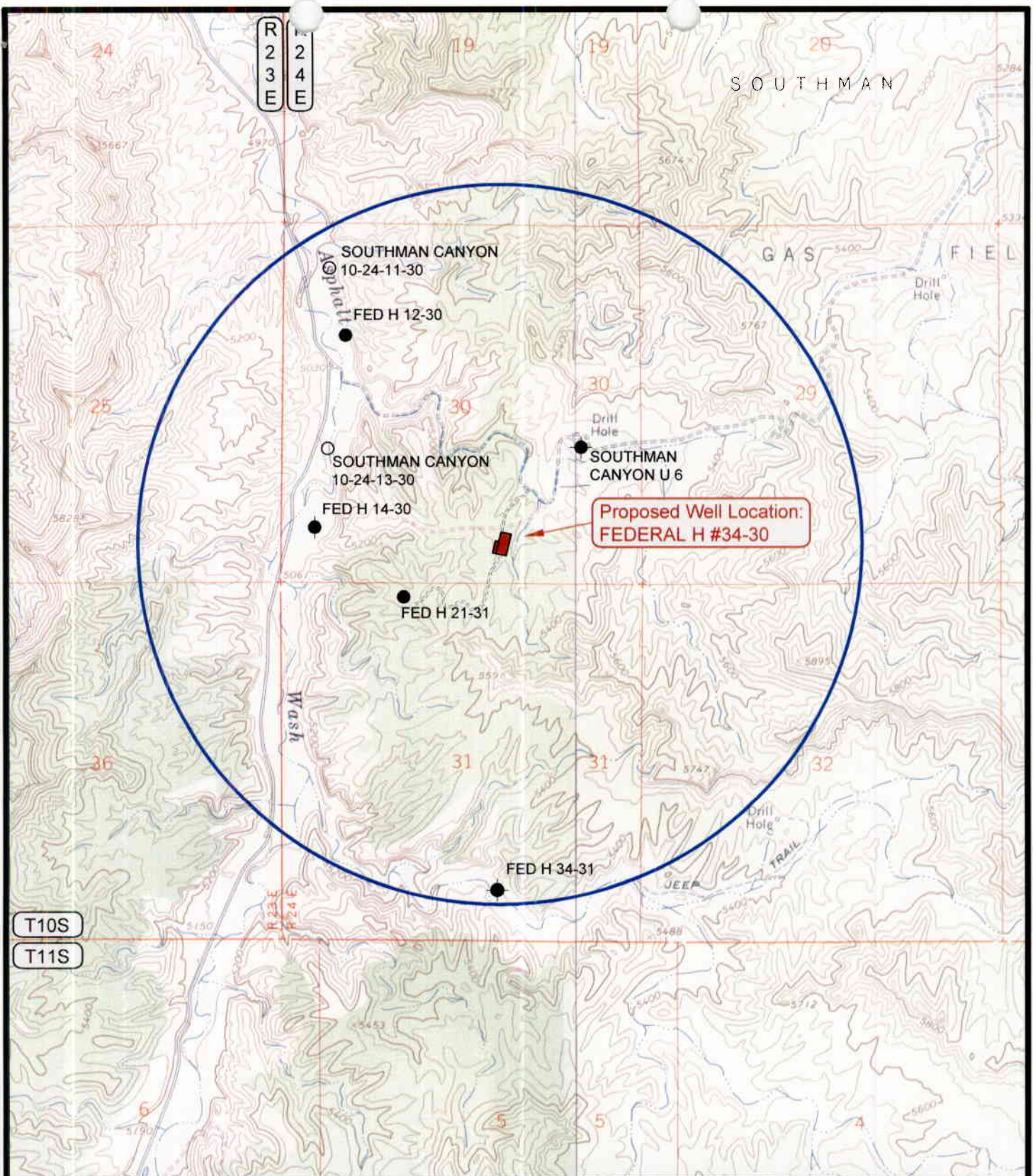
#### SUMMIT OPERATING, LLC

**FEDERAL H #34-30**  
**SECTION 30, T10S, R24E, S.L.B.&M.**  
**602' FSL, 2088' FEL**

**Timberline Land Surveying, Inc.**  
 38 West 100 North Vernal, Utah 84078  
 (435) 789-1365

**SHEET**  
**8**  
**OF 10**





#### LEGEND

- |                    |                                |
|--------------------|--------------------------------|
| ⊘ = DISPOSAL WELL  | ⊘ = WATER WELL                 |
| ● = PRODUCING WELL | ● = ABANDONED WELL             |
| ● = SHUT IN WELL   | ● = TEMPORARILY ABANDONED WELL |
| ○ = PROPOSED WELL  | ⊕ = ABANDONED LOCATION         |

#### TOPOGRAPHIC MAP "C"

SCALE: 1" = 2000'

DRAWN BY: A.D.F.

DATE SURVEYED: 10-26-06

DATE DRAWN: 10-27-06

REVISED: 02-12-07

#### SUMMIT OPERATING, LLC

**FEDERAL H #34-30**  
**SECTION 30, T10S, R24E, S.L.B.&M.**  
**602' FSL, 2088' FEL**

**Timberline Land Surveying, Inc.**

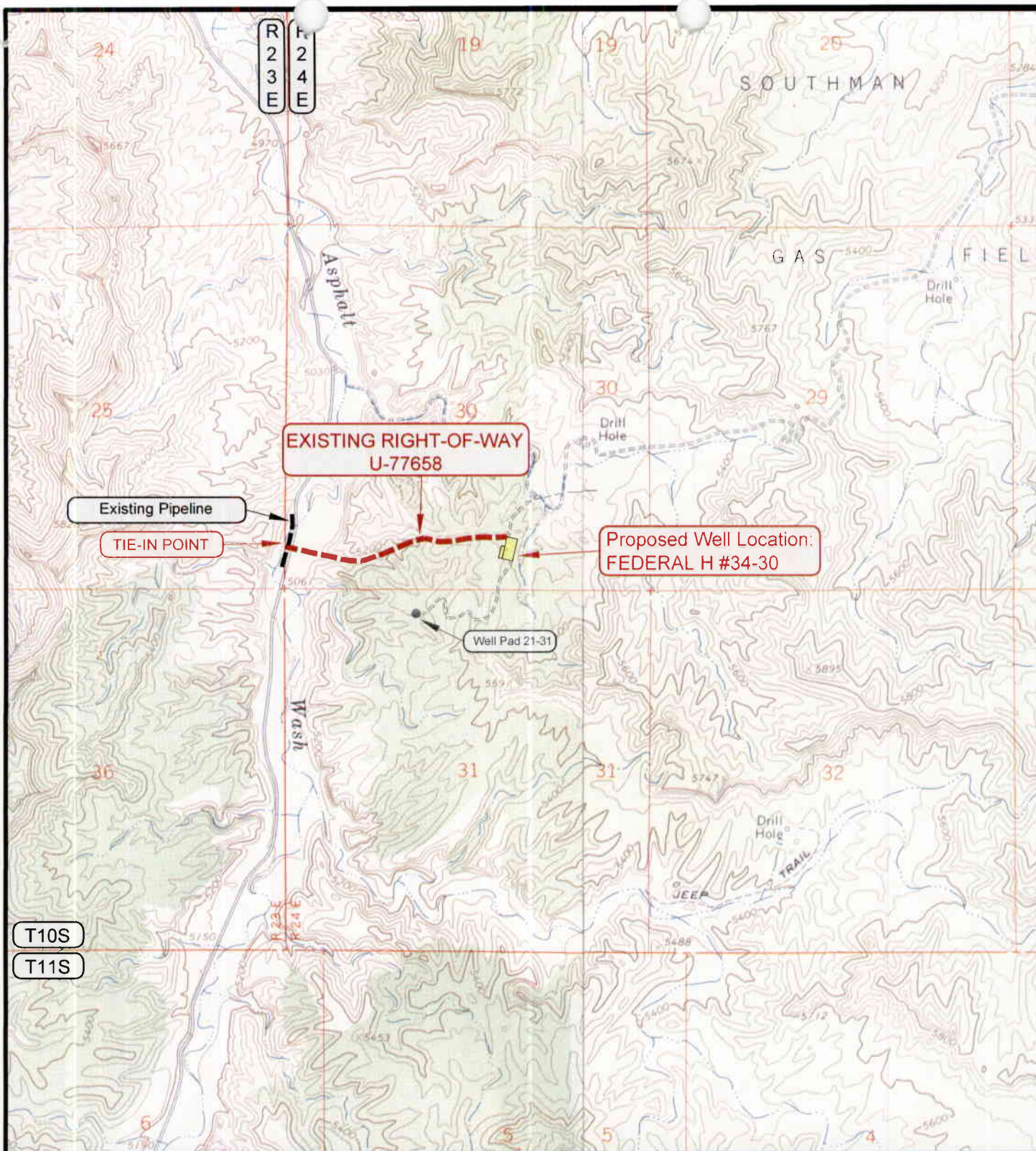
38 West 100 North Vernal, Utah 84078  
 (435) 789-1365

SHEET

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OF 10





**APPROXIMATE PIPELINE LENGTH =  $\pm 3,245$  FEET**

#### LEGEND

- = PROPOSED PIPELINE
- = OTHER PIPELINE
- = PROPOSED ACCESS ROAD
- = SUBJECT WELL
- = OTHER WELLS
- = LEASE LINE AND / OR PROPERTY LINE

**TOPOGRAPHIC MAP "D"**

SCALE: 1" = 2000'

DRAWN BY: A.D.F.

DATE SURVEYED: 10-26-06

DATE DRAWN: 10-27-06

REVISED: 02-12-07

**SUMMIT OPERATING, LLC**

**FEDERAL H #34-30  
SECTION 30, T10S, R24E, S.L.B.&M.  
602' FSL, 2088' FEL**

**Timberline Land Surveying, Inc.**  
38 West 100 North Vernal, Utah 84078  
(435) 789-1365

**SHEET  
10  
OF 10**

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 02/22/2007

API NO. ASSIGNED: 43-047-38883

WELL NAME: FEDERAL H 34-30

OPERATOR: SUMMIT OPERATING LLC ( N2315 )

CONTACT: GINGER STRINGHAM

PHONE NUMBER: 435-940-9001

PROPOSED LOCATION:

SWSE 30 100S 240E

SURFACE: 0602 FSL 2088 FEL

BOTTOM: 0602 FSL 2088 FEL

COUNTY: UTAH

LATITUDE: 39.91434 LONGITUDE: -109.2540

UTM SURF EASTINGS: 649236 NORTHINGS: 4419499

FIELD NAME: NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-66421

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MNCS

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UTB-000014 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 1-75872 )  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

     R649-2-3.  
Unit: \_\_\_\_\_  
☒ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
     R649-3-3. Exception  
     Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_  
     R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

STIPULATIONS: \_\_\_\_\_

1. Coarse Approach  
2. Spacing Slip

T10S R23E T10S R24E

SOUTHMAN CYN  
10-24-11-30

FED H 12-30

## NATURAL BUTTES FIELD

30

SOUTHMAN CYN  
10-24-13-30

SOUTHMAN  
CANYON U 6

FED H 14-30

FEDERAL H 34-30  
FEDERAL H 34-30

FED H 21-31

OPERATOR: SUMMIT OPER LLC (N2315)

SEC: 30 T.10S R. 24E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

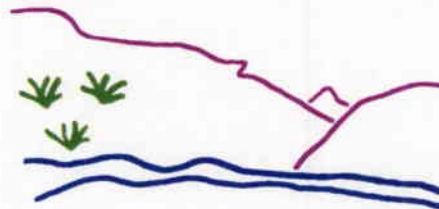
SPACING: R649-3-2 / GENERAL SITING

**Field Status**  
 [ ] ABANDONED  
 [ ] ACTIVE  
 [ ] COMBINED  
 [ ] INACTIVE  
 [ ] PROPOSED  
 [ ] STORAGE  
 [ ] TERMINATED

**Unit Status**  
 [ ] EXPLORATORY  
 [ ] GAS STORAGE  
 [ ] NF PP OIL  
 [ ] NF SECONDARY  
 [ ] PENDING  
 [ ] PI OIL  
 [ ] PP GAS  
 [ ] PP GEOTHERML  
 [ ] PP OIL  
 [ ] SECONDARY  
 [ ] TERMINATED

### Wells Status

[ ] GAS INJECTION  
 [ ] GAS STORAGE  
 [ ] LOCATION ABANDONED  
 [ ] NEW LOCATION  
 [ ] PLUGGED & ABANDONED  
 [ ] PRODUCING GAS  
 [ ] PRODUCING OIL  
 [ ] SHUT-IN GAS  
 [ ] SHUT-IN OIL  
 [ ] TEMP. ABANDONED  
 [ ] TEST WELL  
 [ ] WATER INJECTION  
 [ ] WATER SUPPLY  
 [ ] WATER DISPOSAL  
 [ ] DRILLING



*Utah Oil Gas and Mining*



PREPARED BY: DIANA MASON  
DATE: 28-FEBRUARY-2007



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

March 1, 2007

Summit Operating LLC  
P O Box 683909  
Park City, UT 84068

Re: Federal H 34-30 Well, 602' FSL, 2088' FEL, SW SE, Sec. 30, T. 10 South,  
R. 24 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38883.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor (via e-mail)  
Bureau of Land Management, Vernal District Office



**Operator:** Summit Operating LLC  
**Well Name & Number** Federal H 34-30  
**API Number:** 43-047-38883  
**Lease:** UTU-66421

**Location:** SW SE                      **Sec.** 30                      **T.** 10 South                      **R.** 24 East

### **Conditions of Approval**

#### **1. General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **2. Notification Requirements**

Notify the Division with 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 office  
(801) 733-0983 home

#### **3. Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

#### **4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.**

#### **5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.**



PARADIGM CONSULTING, INC  
PO BOX 790203  
VERNAL, UT 84079  
435-789-4162

June 6, 2007

BLM, Vernal Field Office  
170 S 800 E  
Vernal, UT 84078

43-047-38883

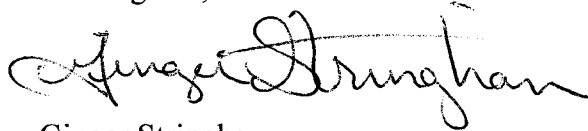
RE: Summit Operating  
UTU-77658  
Federal H 34-30

Dear Mr. Cutler,

As per our conversation today, please find the attached corrected page three of the surface use plan for the subject location.

If you have any further questions or concerns, please feel free to call me at the above address or via e-mail at [gs\\_paradigm@yahoo.com](mailto:gs_paradigm@yahoo.com).

Best regards,



Ginger Stringham

Cc: Summit Operating  
State Division of Oil, Gas and Mining

RECEIVED  
JUN 06 2007

DIV. OF OIL, GAS & MINING

location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel

facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter. Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office and State of Utah, Division of Oil, Gas, and Mining. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association) standards for gas and liquid hydrocarbon measurement.

5. Location and type of water supply

**Water for drilling and cementing will come from a municipal source at 355 South 1000 East Vernal, UT 84078. Dalbo/A-1 Tank.**

6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel

or pit lining material will be obtained from private resources.

7. Methods for handling waste disposal

A) Pit construction and liners:

The reserve pit will be approximately **10 ft.** deep and most of the depth shall be below the surface of the existing ground. Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

B) Produced fluids:

Produced water will be confined to the reserve pit or, if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will be submitted to the authorized officer. **Evaporation may be used instead of trucking to facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL


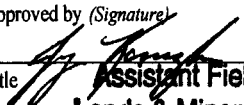
FEB 26 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		BLM VERNAL, UTAH	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		<input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone	
2. Name of Operator Summit Operating LLC			
3a. Address P.O. Box 683909 Park City UT, 84068		3b. Phone No. (include area code) 435-940-9001	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 602' FSL & 2088' FEL SW 1/4 S/E 1/4 At proposed prod. zone same as above		7. If Unit or CA Agreement, Name and No. NA	
14. Distance in miles and direction from nearest town or post office* Approximately 65.8 miles in a southeasterly direction from Vernal UT		8. Lease Name and Well No. Federal H 34-30	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 602'		9. API Well No. 43-047-38883	
16. No. of acres in lease 2,240 Acres		10. Field and Pool, or Exploratory Natural Buttes	
17. Spacing Unit dedicated to this well 40 Acres		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 30, T10S. R24E	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,600'		12. County or Parish Uintah	
19. Proposed Depth 7,100'		13. State UT	
20. BLM/BIA Bond No. on file UTB-000014			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5,312 GR		22. Approximate date work will start* 12/01/2006	
23. Estimated duration 30 Days			

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) Ginger Stringham	Date 02/16/2007
Title Agent		
Approved by (Signature) 	Name (Printed/Typed) Terry Kencika	Date 7-16-2007
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

NOTICE OF APPROVAL

RECEIVED

JUL 23 2007

DIV. OF OIL, GAS & MINING

UDOGM

07CXS0120A

NO NOS



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Summit Operating LLC  
Well No: Federal H 34-30  
API No: 43-047-38883

Location: SWSE, Sec. 30, T10S, R24E  
Lease No: UTU-66421  
Agreement: N/A

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
NRS/Enviro Scientist:	Paul Buhler	(435) 781-4475	(435) 828-4029
NRS/Enviro Scientist:	Karl Wright	(435) 781-4484	
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	
NRS/Enviro Scientist:	Vacant	(435) 781-4476	(435) 828-7381
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Jannice Cutler	(435) 781-3400	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	

Fax: (435) 781-4410

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**Surface COAs:**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

Surface Conditions of Approval or monitoring are listed in the Surface Use Plan of the APD's.

**Other COA's:**

- The soils in the proposed project area have been identified in the lease notice as having critical to severe soil erosion conditions. In order to minimize watershed damage during muddy and wet periods, the authorized officer of the BLM may prohibit surface disturbing activities.
- Submit Sundry Notice Form 3160-5 for pipeline requests and necessary right-of-ways to Authorized Officer of the Vernal BLM if well are productive. A Sundry Notice will detail any changes in pipeline proposal from the Proposed Action.
- Prior to water disposal, submit Sundry Notice Form 3160-5 specifying Approved Water Disposal facilities to be used in conjunction with Proposed Action.
- During operations, if any vertebrate paleontological resources are discovered, all operations affecting such sites shall be immediately suspended, and all discoveries shall be left intact until authorized to proceed by the Authorized Officer. The Authorized Officer of the Vernal BLM office shall be notified within 48 hrs of the discovery and a decision as to the preferred alternative/course of action will be rendered.
- The operator will control noxious weeds along access road use authorizations, pipeline route authorizations, well sites, or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM weeds specialist or the appropriate County Extension Office. On BLM administered land, it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or possibly hazardous chemicals.
- All applicable local, state, and/or federal laws, regulations, and/or statutes will be complied with.
- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment. If such equipment creates ruts in excess of four inches deep, the soil shall be deemed too wet to adequately support construction equipment.

- The access road will be crowned and ditched. Flat-bladed roads are not allowed.
- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.
- Prevent fill and stock piles from entering drainages.
- The reserve pit will be lined with a 10 ml or greater liner and felt prior to spudding.
- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.
- The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- All permanent (on-site six months or longer), above ground structures constructed or installed, including pumping units, any subsequent approved equipment/facilities will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Olive Black as determined during the on-site inspection.

Interim seed mix:

Bottlebrush Squirreltail grass	<i>Elymus elymoides</i>	4 lbs/acre
Hy-crest Crested Wheatgrass	<i>Agropyron cristatum</i>	4 lbs/acre
Wyoming Big Sagebrush	<i>Artemisia tridentata var. Wyomingensis</i>	1 lbs/acre
Shadscale saltbush	<i>Atriplex confertifolia</i>	3 lbs/acre

Final reclamation seed mix:

Bottlebrush Squirreltail grass	<i>Elymus elymoides</i>	4 lbs/acre
Hy-crest Crested Wheatgrass	<i>Agropyron cristatum</i>	4 lbs/acre
Wyoming Big Sagebrush	<i>Artemisia tridentata var. Wyomingensis</i>	1 lbs/acre
Shadscale saltbush	<i>Atriplex confertifolia</i>	3 lbs/acre

- All pounds are in pure live seed.
  - All seed and mulch will be certified weed free.
  - Drill seeding is the preferred method.
  - Rates are set for drill seeding; double the rate if broadcasting.
  - If broadcasting seed: The seed will be walked into the soil with a dozer immediately after the seeding is completed, or covered by soil using a drag chain.
  - Reseeding may be required if initial seeding is not successful.
- The operator will be responsible for treatment and control of invasive and noxious weeds. A Pesticide Use Plan (PUP) will be submitted and approved prior to the application of herbicides or other potentially hazardous chemicals on Federal Lands.
- Upon well completion, the well pad location up to the deadmen, will be recontoured to the approximate natural contours and the stockpiled topsoil will be spread evenly over the reclaimed area and then re-seeded using the above mentioned interim seed mix.
- Once the location is plugged and abandoned, it shall be recontoured to the natural topography, topsoil shall be respread, and the entire location shall be seeded with the final reclamation seed mix. Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer, immediately after the seeding is completed, or covered by soil using a drag chain.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.

## **DOWNHOLE COAs:**

### **SITE SPECIFIC DOWNHOLE COAs:**

- The top of the production casing cement shall extend a minimum of 200 feet above the intermediate casing shoe.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:**

### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.



- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

# CONFIDENTIAL

FORM 9

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTU-66421

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL ☐ GAS WELL ☒ OTHER \_\_\_\_\_

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

2. NAME OF OPERATOR:  
Summit Operating, LLC

8. WELL NAME and NUMBER:  
Federal H 34-30

9. API NUMBER:  
4304738883

3. ADDRESS OF OPERATOR:  
PO Box 683909 CITY Park City STATE UT ZIP 84068-3909 PHONE NUMBER: (435) 940-9001

10. FIELD AND POOL, OR WILDCAT:  
Texacoma

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 602' FSL & 2088' FEL SW/4 SE/4

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 30 10S 24E

STATE: UTAH

### 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 8/11/2007	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: Well spudded, drilling to commence
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Well was spudded on 08/11/2007, drilling commenced thereafter.

NAME (PLEASE PRINT) David Kaudson

TITLE operations

SIGNATURE [Signature]

DATE Oct 3 07

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STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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FORM 6

OCT 04 2007

ENTITY ACTION FORM

DIV. OF OIL, GAS & MINING

Operator: Summit Operating, LLC  
Address: PO Box 683909  
city Park City  
state UT zip 84068-3909

Operator Account Number: N 2315

Phone Number: (435) 940-9001

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304738883	Federal H 34-30		SWSE	30	10S	24E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	99999	16378	8/11/2007			10/16/07	
Comments: Well was spudded on 08/11/2007 MVRD per Well Completion Report							

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Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Kristi Higgs

Name (Please Print)

Kristi Anne Higgs  
Signature

Title

10/13/2007  
Date

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-66421
2. NAME OF OPERATOR: Summit Operating, LLC		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: PO Box 683909 Park City UT 84068-3909		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: 602' FSL & 2088' FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 30 10S 24E		8. WELL NAME and NUMBER: Federal H 34-30
PHONE NUMBER: (435) 940-9001		9. API NUMBER: 4304738883
		10. FIELD AND POOL, OR WILDCAT: Natural Buttes
		COUNTY: Uintah
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 10/22/2007	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Drill out temp plugs</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

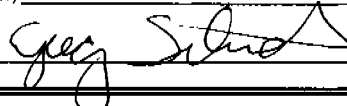
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

10-22-07: Drilled out 3 temporary composite bridge plugs at 5965', 6075' & 6160' opening up plugged back Mesa Verde perms at 5989-6009', 6134-44', 6171-78', 6186-88', 6196-98' and 6200-02'. Flowed back frac load to tank.

10-24-07: Put well down gas sales line from the above perms along with the previously open Mesa Verde perms 5898-5913' & 5916-30'.

10-27-07: 24-hour flow test: FCP=800, FTP=600, 840 MCFPD, 82 BLWPD & 5 BCPD on 24/64" choke.

Note: Current PBTD is CIBP @ 6390'.

NAME (PLEASE PRINT) <u>Greg Schmidt</u>	TITLE <u>Agent for Summit Operating, LLC</u>
SIGNATURE <u></u>	DATE <u>10/30/2007</u>

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DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**UTU-66421**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:  
**FEDERAL H 34-30**

9. API NUMBER:  
**4304738883**

10. FIELD AND POOL, OR WILDCAT:  
**NATURAL BUTTES**

1. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER \_\_\_\_\_

2. NAME OF OPERATOR:

**SUMMIT OPERATING, LLC**

3. ADDRESS OF OPERATOR:

**PO BOX 683909**

CITY **PARK CITY**

STATE **UT**

ZIP **84068**

PHONE NUMBER:

**(435) 940-9001**

4. LOCATION OF WELL

FOOTAGES AT SURFACE: **602' FSL, 2088' FEL**

COUNTY: **UINTAH**

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **SWSE 30 10S 24E**

STATE:

**UTAH**

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input checked="" type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please be advised that the above listed well was placed into production on 10/24/2007. Our first sales began 10/24/07.

NAME (PLEASE PRINT)

*David Lillywhite*

TITLE

*President*

SIGNATURE

*David Lillywhite*

DATE

*10-25-07*

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STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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AMENDED REPORT ☐ FORM 8  
(highlight changes)

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL: OIL WELL ☐ WELL GAS ☒ DRY ☐ OTHER \_\_\_\_\_

b. TYPE OF WORK: NEW WELL ☒ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER \_\_\_\_\_

2. NAME OF OPERATOR: **Summit Operating, LLC**

3. ADDRESS OF OPERATOR: **PO Box 683909 Park City UT 84068-3909** PHONE NUMBER: **1-435-940-9001**

4. LOCATION OF WELL (FOOTAGES)  
AT SURFACE: **602' FSL & 2088' FEL (SW/4SE/4)**  
AT TOP PRODUCING INTERVAL REPORTED BELOW **Same as above**  
AT TOTAL DEPTH: **Same as above**

14. DATE SPUDDED: **08/11/2007** 15. DATE T.D. REACHED: **08/26/2007** 16. DATE COMPLETED: **9-21-07**  
ABANDONED ☐ READY TO PRODUCE ☒

18. TOTAL DEPTH: MD **7211** 19. PLUG BACK T.D.: MD **7190** 20. IF MULTIPLE COMPLETIONS, HOW MANY? **4**  
TVD **same** TVD **same**

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**UTU-66421**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:  
**Federal H 34-30**

9. API NUMBER:  
**43-047-38883**

10. FIELD AND POOL, OR WILDCAT  
**Natural Buttes**

11. QTR/CTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  
**SW/4 SE/4 Sec 30 T10S-R24E**

12. COUNTY  
**Uintah** 13. STATE  
**UTAH**

17. ELEVATIONS (DF, RKB, RT, GL):  
**5312 GL, 5327 KB**

PTH BRIDGE MD **5965 Composite**  
PLUG SET: TVD **same**

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)  
**Open Hole: GR-SP-DIL-Caliper-Density-Neutron-GR,CBL,CCL**  
**Cased Hole: GR-CBL-CCL-SD,DSN,ACTR,BVP**

23. WAS WELL CORED? NO ☒ YES ☐ (Submit analysis)  
WAS DST RUN? NO ☒ YES ☐ (Submit report)  
DIRECTIONAL SURVEY? NO ☒ YES ☐ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
12 1/4	9 5/8 J55	36	surf	2032	none	710 Lt/prem	226.4	surf	none
7 7/8	4 1/2 N80	11.6	surf	7211	none	190sx Hi-fill	360.3	430' measured	none
						tail in w/ 1050			
						sx Prem 50/50			

25. TUBING RECORD

HOLE SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	5855							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
A) Mesa Verde (open)	5898	5930	5898	5930	5898-5913 & 5916-5930	.40	62	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
B) Mesa Verde (temp PB)	5989	6009	5989	6009	5989-6009	.40	42	Temp PB under comp plug
C) Mesa Verde (temp PB)	6134	6144	6134	6144	6134-6144	.40	22	Temp PB under comp plug
D) Mesa Verde (temp PB)	6171	6202	6171	6202	6171-78, 86-88, 96-98, 6200-6202	.40	34	Temp PB under comp plug

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
5898-5930	Frac'd w/ 54866 gal x-linked gelled wtr & 145,000 # of 20/40 sand
5989-6009	Frac'd w/ 42089 gal x-linked gelled wtr & 100,000 # of 20/40 sand
6134-6144	Frac'd w/ 20395 gal x-linked gelled wtr & 40,000 # of 20/40 sand
6171-6202	Frac'd w/ 18509 gal x-linked gelled wtr & 45,026 # of 20/40 sand

29. ENCLOSED ATTACHMENTS:

☒ ELECTRICAL/MECHANICAL LOGS ☒ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY  
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER: \_\_\_\_\_

30. WELL STATUS:

P

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## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: <b>09/21/2007</b>		TEST DATE: <b>09/22/2007</b>		HOURS TESTED: <b>7</b>		TEST PRODUCTION RATES: →	OIL - BBL: <b>0</b>	GAS – MCF: <b>214</b>	WATER – BBL: <b>42</b>	PROD. METHOD: <b>flowing</b>
CHOKE SIZE: <b>20/64</b>	TBG. PRESS. <b>N/A</b>	CSG. PRESS. <b>660</b>	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: <b>0</b>	GAS – MCF: <b>733</b>	WATER – BBL: <b>144</b>	INTERVAL STATUS: Flowing back frac water and produced gas

## INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: ➔	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: ➔	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: ➔	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: ➔	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES:   ↕	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES:   ↕	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
Green River	Surf	3024	Lt. Gray to green black shale with some limes and porous sandstone stringers	Green River	surf
Wasatch	3024	4712	Red brown-lt. green shale, white to gray sandstones w/ limestone, cream to med gray, brown, hard, dense	Wasatch	3024
Mesa Verde	4712	6956	Sandstones interbedded with shales and siltstones, w/ some black coal intervals	Mesa Verde	4712
Castlegate	6956	7210	Dk gray - dark brown shales, sandstone white - lt. gray - lt. brown, siltstones and minor coals	Castlegate	6956


## 34. FORMATION (Log) MARKERS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.) **Vented**

35. ADDITIONAL REMARKS (Include plugging procedure) Additional perfs and plugs: CIBP at 7100', plugging back tight Castlegate perfs at 7134-36 & 7141-45' w/ 4 spf (32 holes). CIBP at 6390', plugging back tight Lower Mesa Verde perfs at 6501-04 (misfire), 6507-11 (misfire), 6512-17, 6522-25, 6446-48 and 6453-55' w/ 3 spf (72 holes). Temporary composite plugs are currently at 5965, 6075, & 6160'. We are continuing to drill and clean out the remaining 3 composite plugs to open up the other 3 sets of Mesa Verde perfs shown under section 26 above. We are currently flowing just the top set of MV perfs.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) David Lillywhite TITLE Summit Operating, LLC

SIGNATURE  DATE 09/28/2007

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

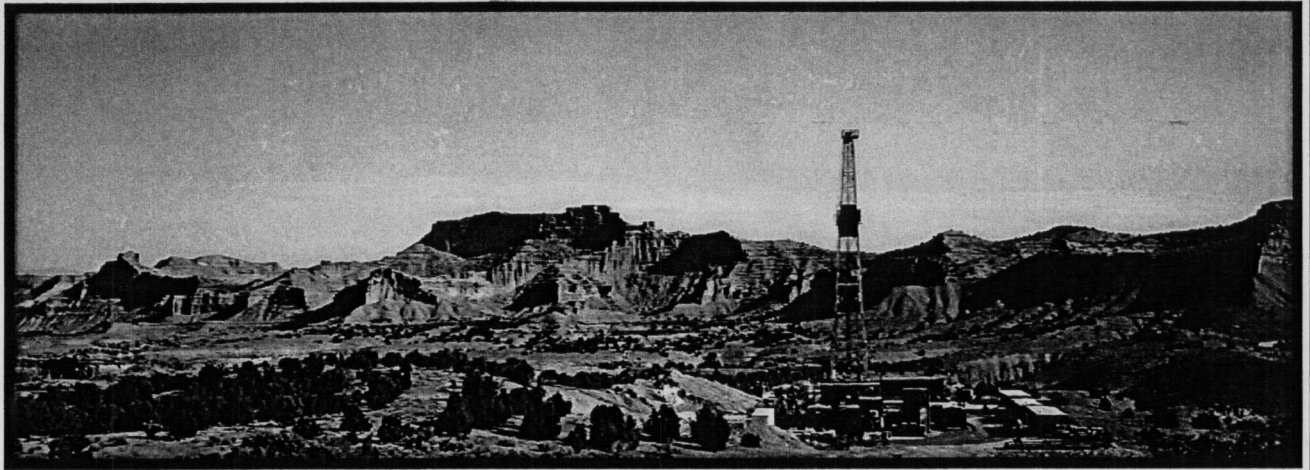
Phone: 801-538-5340  
Fax: 801-359-3940

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Federal H 34-30  
43-047-38883  
30 10s 24e

## **SUMMIT OPERATING LLC**

### **GEOLOGY REPORT**



FEDERAL H 34-30  
SW SE Sec. 30, T10S, R24E  
602' FSL & 2,088' FEL  
UINTAH CO., UTAH  
NATURAL BUTTES



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Steamboat Energy Consultants  
PO BOX 881570  
Steamboat Springs, Colorado 80488  
Office (970) 870 9964

## **GEOLOGY REPORT**

### **Summit Operating LLC**

**Federal H 34-30**  
**602' FSL & 2,088' FEL**  
**SW SE Sec. 30, T10S, R24E**  
**Uintah County, Utah**

Wellsite Geologist: Gregg Smith  
Fort Collins, CO  
(970) 819 5450

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## GEOLOGICAL REPORT

Summit Operating LLC  
Federal H 34-30

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## Well Resume

Operator: **Summit Operating LLC**

<b>WELL INFORMATION</b>	Well Name	Federal H 34-30		
	Location	SW SE Sec. 30, T10S, R24E		
	County, State	Uintah County, Utah		
	Spot	602' FSL & 2,088' FEL		
	Spud Date	August 21, 2007		
	Total Depth	Driller 7,210'	Logger 7,210'	
	Completion Date (TD)	August 25, 2007	Time: 5:00 PM	
<b>HOLE</b>	Hole Size	12 1/4" to 2,075'	7 7/8" to TD	
	Casing	Surface 9 5/8", 36#, set @ 2,034'	Production 4 1/2", 16.01, set @ TD'	
	Cement	170 sks 16% Gel-3% salt-10# Gilsonate-3# GR, 220 sks 2% CaCl, 340 sks 4% CaCl		
<b>ELEV</b>	GL	5,312'		
	KB	5,327'		
<b>PERSONNEL</b>	Exploration Manager	Gregory N. Schmidt, Diamondback Oil Partners, LLP		
	Drilling Foreman	Daryl Knop		
	Wellsite Geologist	Gregg Smith, Steamboat Energy Consultants		
	Tool Pusher	Tom Alber		
<b>CONTRACTORS</b>	Drilling Company	True Drilling		
	Rig #	22		
	Mud Company	Mustang Drilling Fluids		
	Mud Type	Water Chem-Gel	Mud Up @ 3,967'	
	Mud Engineer	Dan Kastel		
	Mud Logging Company	None		
	Petrophysical Logging Company	Halliburton		
	Logging Engineer:			
	Log Suite	HRI/SD/DSN, TD to Sfc Csg.		
	Drill Stem Test Company	None		
	<b>SUMMARY</b>	Drilling Days	5	
Rotating Hours		86.00		
Bottom Hole Formation		Castlegate		
Potentially productive zones		Green River, Wasatch, Mesaverde, Castlegate		
Final Status		4 1/2 " production casing set @ TD.		

# FORMATION LOG TOPS

Federal H 34-30

SW SE Sec. 30, T10S, R24E

Formation	KB 5,327'	
	LOG TOPS	
	DEPTH	DATUM
<i>Green River Formation</i>	Surface	-
<i>Wasatch</i>	3,014'	(+2,313)
<i>Masaverde</i>	4,712'	(+615)
<i>Castlegate</i>	6,956'	(-1,628')

TD

6,210'

## SUMMARY AND CONCLUSIONS

The Federal H 34-30 was drilled out from pre set surface casing on 8/21/07 and drilled to a total depth of 7210' on 8/25/07. The hole was drilled using a single PDF bit and mud motor requiring only 86 total rotating hours. Due to high formation gas encountered while drilling the well was shut in on three separate occasions at 3,933', 4,310', and 4,589' to control the well primarily by mixing barite to get the mud weight up. Ultimately, at the time total depth was achieved, the mud weight was increased to 10.9 pounds to control the formation gas and allow petrophysical logging and casing operations to be completed safely. A proximal lightning strike knocked out most of the rig's EDR electronics resulting in an absence of recorded drill time from 5,630' to 5,880', and a short stoppage in operations for repairs at 5,880'. There were no other significant operational delays or problems encountered.

Zones of interest in the Federal H 34-30 include the Green River, Mesaverde and Castlegate Formations. All Formations are potentially gas productive. A preliminary analysis of the e-logs and total formation gas recorded while drilling suggest the following zones to be potentially gas productive:

### PRIMARY ZONES OF INTEREST

GREEN RIVER		
ZONE		Units GAS
2,708' - 2,726'		6472
2,790' - 2,802'		9383

WASATCH		
ZONE		Units GAS
3,350' - 3,378'		9216
3,848' - 3,850'		9133
4,250' - 4,264'		8900
4,487' - 4,498'		5300
4,526' - 4,534'		7500

MESAVERDE		
ZONE		Units GAS
5,505' - 5,524'		7990
5,923' - 5,930'		7966
5,988' - 6,010'		8788
6,030' - 6,202'		8572
6,340' - 6,358'		6446
6,445' - 6,449'		3200
6,453' - 6,457'		8407
6,510' - 6,518'		7838
6,604' - 6,608'		8722
6,715' - 6,728'		5700
6,818' - 6,822'		4600

CASTLEGATE		
ZONE		Units GAS
7,024' - 7,040'		8000
7,048' - 7,070'		2985
7,132' - 7,150'		4300

## SUMMARY AND CONCLUSIONS

Many additional zones of interest are present throughout this well. The aforementioned zones are not intended as a total and conclusive list of all productive zones, merely as a starting point. A more exact determination of formation water resistivity may assist in narrowing this long list or, indeed, may greatly expand it.

Sample examination began at 2,034' in the Green River formation. General lithology was typical for the Green River consisting of interbedded white, friable sandstone, light green claystone and grey to brown shales with minor limestone. The potentially productive sands of this formation are described as follows; SANDSTONE; white to light gray, friable, fine to lower medium grained, subrounded to subangular, moderately well sorted. poorly consolidated with abundant fine black mineral inclusions, milky white, slightly calcareous matrix, trace poor intergranular porosity, trace spotty light brown stain, possible dead oil stain, no fluorescence, odor or cut.

The top of the Wasatch Formation was clearly discernable as the drilling mud changed color from grey to red brown, the result of an increased amount of distinct red brown shale. Potentially productive sandstones of the Wasatch are generally fine grained and occasionally silty, generally described as light gray to gray green, friable to firm, fine to lower medium grained, subrounded to subangular, moderately well sorted, well consolidated, commonly with medium grained black carbonaceous flakes, slightly calcareous matrix, no to poor visible porosity, no fluorescence stain odor or cut. The large amount of gas produced from these sands as they were drilled is incongruous with their silty and tight appearance and may be an indication of an over-pressured reservoir.

No clear indication of an exact unconformable Mesaverde Formation top was apparent. A gradual change in the shales of the Wasatch Fm. from red brown and green, subblocky, subwaxy shale to a dark grey and brown, somewhat silty shale is the best indication of the formation top. The sandstones of the Mesaverde were not very distinctive compared to those of the Wasatch. Described as: SANDSTONE; light gray to gray, firm, fine grained to very fine grained, subangular, well sorted and consolidated with abundant black carbonaceous stringers and partings, no to poor visible porosity, no fluorescence stain odor or cut. As with the Wasatch the Mesaverde sandstones generally appear tighter than would be expected considering the large amount of produced gas while drilling. The potentially productive zone from 6,030' to 6,202' is characterized by abundant coal. These coals are thin and may act as a source of gas to charge up any of the subjacent thin sandstones.

Two well developed sandstone zones were present in the Castlegate member of the Mesaverde Formation:

1) 7020 – 7030 SANDSTONE; brown to light gray, occasionally white, fine to lower fine grained to silty, subangular to subrounded, dark brown to black mineral inclusions, well consolidated, moderately well to poorly sorted, calcareous, abundant black SHALE stringers and inclusions, no visible porosity, no fluorescence stain odor or cut.

2) 7050 – 7070 SANDSTONE; white to light gray, friable to firm, fine to lower medium grained, subangular to subrounded, moderately well sorted and consolidated, fine black mineral inclusion, silica



## SUMMARY AND CONCLUSIONS

cement, occasionally with black shale stringers, occasionally with poor to fair intergranular porosity, no fluorescence stain odor or cut

An additional promising zone was drilled at 7,132' and 7,150'. Although less developed on e-logs than the upper Castlegate sandstones the zone appeared to be somewhat fractured as it was drilled and produced a sizeable gas increase of 4000 units even though the mud weight at the time was 10.8+.

After evaluation of E-logs four and one half inch casing was set at TD to further evaluate all zones

# DAILY DRILLING CHRONOLOGY

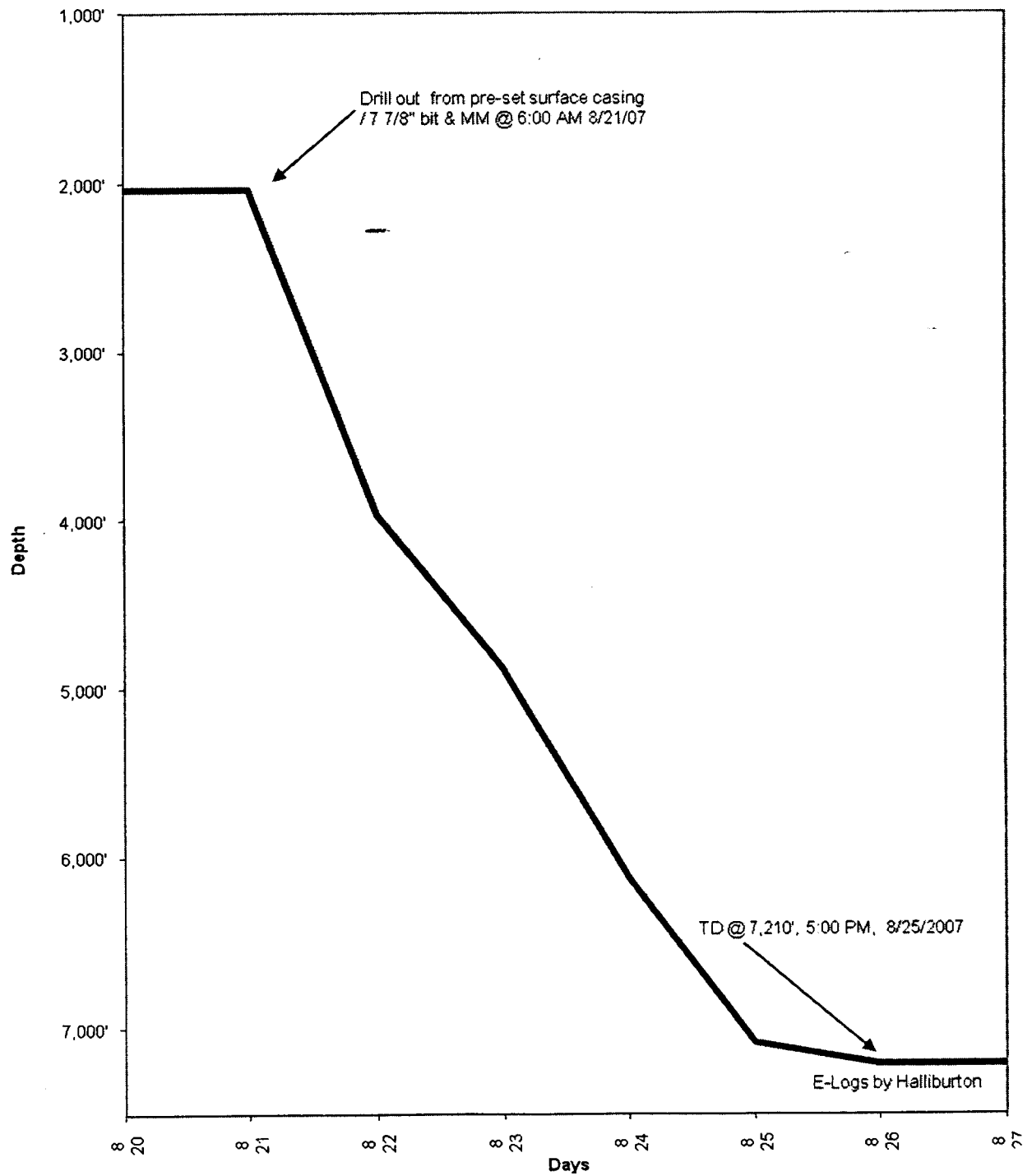
Summit Operating LLC

Federal H 34-30

Day	DATE (2007)	7:00 AM DEPTH (MDT)	Footage Previous 24 Hrs.	Activity
1	8 20	2,034'	0'	Nipple Up, test BOP, pick up BHA, drill cement and shoe, drill out 6:00 AM.
2	8 21	2,034'	2,034'	Drilling, repair swivle, shut well in @ 3367', circulate gas through gas buster.
3	8 22	3,967'	1,933'	Repair swivel, mix mud and kill gas flow, drilling, shut well in @ 4310', circulate out gas, weight up mud with barite, drilling, shut well in @ 4589', circulate gas flow, drilling.
4	8 23	4,867'	900'	Drilling, rig struck by lightning - knocked out EDR, wait on Pason, repair damaged electronics, drilling.
5	8 24	6,113'	1,246'	Drilling,
6	8 25	7,084'	971'	Drilling, TD @ 5:00 PM, circulate bottoms up, short trip to shoe, circulate, strap out for E-Logs.
7	8 26	7,210'	126'	Run E-Logs, trip in to condition hole for production casing.
8	8 27	7,210'	0'	Cement casing.

# PENETRATION RATE/TIME CHART

## FEDERAL H 34-30



# DRILLING PARAMETERS - DIRECTIONAL SURVEYS

Operator: Summit Operating LLC

Well Name: Federal H 34-30

DRILLING PARAMETERS				
DEPTH	ROTARY TABLE SPEED	WT. ON BIT (1000 lbs)	PUMP PRESSURE	STROKES PER MINUTE
2,034'	15	10	1050	120
2,654'	55/90	15	1300	120
3,933'	55/90	17	1250	120
4,125'	55/90	15	1330	118
4,403'	53/90	15	1365	115
4,085'	55/90	15	1650	120
5,265'	55/90	15	1540	118
5,788'	53/90	14	1357	118
6,066'	55/90	18	1700	120
6,440'	55/90	15	1868	120
6,811'	55/90	18	1671	120
7,070'	55/90	22	1850	120

DIRECTIONAL SURVEYS	
DEPTH	INCLINATION
2,085'	1.5°
2,576'	2°
5,255'	1.5°

# BIT RECORD

OPERATOR: Summit Operating LLC

WELL NAME: Federal H 34-30

Drill Pipe	4 1/2"	16.6#
Drill Collars	15	

PUMPS	#1	Emsco F-800	6X9
	#2	G-D PZ-8	6X8

CONTRACTOR	True Drilling		
	RIG #	22	

NO	SIZE	MAKE	TYPE	JET	SERIAL	DEPTH OUT	FEET	HOURS	FT/HR	ACCUM DRLG HRS	WT 1000 LBS	RPM	VERT DEV	PUMP PRESS	SPM		MUD			DULL COND				FORMATION REMARKS
															1	2	WT	VIS	WL	T	B	G	OTHER	
1	7 7/8	HTC	506Z	6x16	7111687	7210	5176	86	60	86.0	15	55/90	2	1500	120		10.8	45	8.4	1	NA	1		Castlegate

86 Total Rotating Hours

# DAILY DRILLING MUD REPORT

Operator: Summit Operating LLC

Well Name: Federal H 34-30

Mud-up Depth: 3,967' Mud Type: Chem-Gel Mustang Drilling Fluids

Report #	1	2	3	4	5	6	7	8		
Date, 2007	8 19	8 20	8 21	8 22	8 23	8 24	8 25	8 26		
Depth (ft) TVD	2,034'	2,034'	2,200'	4,235'	4,945'	6,215'	7,098'	7,210'		

Weight (lbs/gal.)	WATER	8.5+	9.3	9.4	10.6	10.9		
Funnel Viscosity (Sec/qt. API)		35	38	39	47	46		
Plastic Viscosity cp		7	11	14	23	22		
Yield Point (lb/100 ft <sup>2</sup> .)		6	10	9	20	15		
Gel Strength 10 sec/10 min.		1/4	2/10	1/6	5/8	3/10		
pH (meter)		9.5	10.1	10.3	10.3	10.1		
Filtrate API (ml <sup>3</sup> /30 min)		15.0	9.8	8.4	8.0	7.0		
Cake Thickness 32nd		2	2	2	2	2		
Alkalinity, Mud (Pm)		0.9	1.3	1.4	1.3	1.2		
Alkalinity, Filtrate (Pf/Mf)		.35/.9	.6/1.5	.8/2.0	.85/2.0	.65/2.0		
Chloride Content, (mg/L)		1,300	1,700	1,700	1,700	1,700		
Total Hardness, (mg/L)		tr	tr	tr	20	20		
Sand Content (% by Vol.)		tr	tr	0.25	0.5	0.5		
Retort Solids (% by Vol.)		/2.0	/7.0	/8.0	/1.5	/6.0		
Retort Liquid (% Vol.) Oil/Wtr		98.0	93.0	92.0	85.0	84.0		
Methylene Blue Capacity		-	-	-	-	-		
ECD		8.650	9.550	9.625	11.100	11.275		
KCl		-	-	-	-	-		

Comments:

## SAMPLE DESCRIPTIONS

Begin drilling in the Green River Formation with 7 7/8" PDC Bit and Mud Motor. Lagged samples caught by rig personnel. Annotated formation tops are E-Log picks.

DEPTH	LITHOLOGY
2000-2050	Predominately cement.
2050-2100	CLAYSTONE; light green to gray green, firm to soft, platy to subblocky, trace sandy in part. SANDSTONE; white to light gray, fine grained, smooth clusters, tight.
2100-2150	CLAYSTONE; light green, soft to firm, subblocky, occasionally platy, subwaxy. SANDSTONE; white to light green, hard, fine to lower fine grained, occasionally black to green mineral inclusion, tight throughout.
2150-2200	CLAYSTONE; light green, subblocky, predominantly subwaxy, commonly silty in part, trace SANDSTONE stringers. SANDSTONE; white, clean, firm to friable, fine grained, subrounded to subangular, well sorted and consolidated, scattered fine black mineral inclusion, trace poor intergranular porosity, no fluorescence stain odor or cut.
2200-2250	SANDSTONE; white to clear, predominantly smooth friable clusters, occasionally loose unconsolidated grains, subrounded to subangular, moderately well sorted, poor consolidated, no to poor visible porosity, no fluorescence stain odor or cut.
2250-2300	CLAYSTONE; dark gray to dark green, firm, blocky, occasionally sandy in part. SANDSTONE; continued as above, occasionally unconsolidated grains.
2300-2350	CLAYSTONE; green to light green to gray green, firm, subblocky, subwaxy, trace calcareous. LIMESTONE; brown to dark brown, firm, blocky, fine to microcrystalline, predominantly dense, trace fine angular inclusion, tight.
2350-2400	CLAYSTONE; green to gray to gray green, soft to firm, subblocky occasionally subwaxy, occasionally brown calcareous. LIMESTONE; brown to dark brown, hard to firm, blocky, fine to microcrystalline, grading to calcareous CLAYSTONE.
2400-2450	SANDSTONE; white to light gray, friable to firm, fine grained, subrounded, very fine green to black mineral inclusion, slightly calcareous matrix, well sorted and consolidated, occasionally fair intergranular porosity, trace spotty light brown stain, dull yellow fluorescence, no cut or odor.
2450-2500	SHALE; distinct change, dark brown to gray, soft, platy, subfissile. CLAYSTONE; gray green to light green, soft, subblocky, trace silty in part.
2500-2550	CLAYSTONE; gray green to green to gray to brown, soft, subblocky, slightly calcareous. SHALE; continued as above.
2550-2600	CLAYSTONE; green to gray to brown, subblocky, continued as above. SHALE; gray to dark gray, soft, platy, subfissile, traces black, fissile, carbonaceous.
2600-2650	SHALE; light gray green to gray, soft, subblocky. SHALE; dark gray to gray to brown, firm to soft, subfissile, trace black fissile carbonaceous.
2650-2700	SHALE and CLAYSTONE; continued as above, occasionally calcareous in part. occasionally silty. SANDSTONE; light gray to green. firm, very fine grained to silty, slightly calcareous, tight throughout.

## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
2700-2750	SANDSTONE; white to light gray, friable, fine to lower medium grained, subrounded to subangular, moderately well sorted. poor consolidated, abundant fine black mineral inclusion, milky white, slightly calcareous matrix, slightly calcareous in part, trace poor intergranular porosity trace spotty light brown stain, NFOC possible dead oil, NFOC
2750-2800	SANDSTONE; continued as above, general decrease in grained size, slightly calcareous matrix, tight, no fluorescence stain odor or cut. CLAYSTONE; light green to gray, soft to firm, subblocky to platy.
2800-2850	CLAYSTONE; varicolored, green to gray to brown to firm to soft, subblocky, occasionally subwaxy. SANDSTONE; light gray to off white, very fine grained to silty, tight.
2850-2900	SHALE, gray to brown to dark gray, firm, platy, subfissile to fissile, trace black very carbonaceous stringers. LIMESTONE; dark brown, firm to hard, blocky, fine to microcrystalline, occasionally shale parting, trace fossil, (fusilinid), tight.
2900-2950	CLAYSTONE; light green to gray, firm to soft, blocky to subblocky subwaxy. SANDSTONE; gray to light gray, firm to hard, very fine to lower fine grained, subangular well consolidated, moderately well sorted, black mineral inclusion, tight throughout.
2950-3000	SHALE; dark gray to dark brown, firm, platy to subplaty, subfissile, slightly calcareous. LIMESTONE; brown to dark brown, firm, blocky fine crystalline, occasionally light brown, mottled texture, fossil, trace loose shell fragments, tight throughout
3000-3050	SANDSTONE; green to gray green, firm to very friable, fine to lower fine grained, occasionally silty, poor to moderately well sorted, subangular, black to green mineral inclusion, no visible porosity, moderately bright yellow fluorescence, NSOC. LIMESTONE; light brown, soft, predominantly mottled fossil in part, commonly with floating sand grains, tight throughout.

### **WASATCH 3,014' (+2,313')**

3050-3100	SHALE; moderately distinct change, red brown, soft, subblocky. SANDSTONE; continued as above, light green, fine grained to silty.
3100-3150	SANDSTONE; off white to light green, firm to friable, medium to lower medium grained, moderately well sorted, subrounded, slightly calcareous, trace poor intergranular porosity, spotty yellow fluorescence, NSOC
3150-3200	SHALE; red brown to gray, soft, subblocky, occasionally subwaxy, trace varigated. SANDSTONE; continued as above, tight.
3200-3250	SANDSTONE; red brown, very friable, lower medium to fine grained, poor sorted and consolidated, commonly with black to green to brown mineral inclusion, occasionally light red brown arkose matrix, slightly calcareous, no visible porosity no fluorescence stain odor or cut. SHALE; red brown continued as above.
3250-3300	SHALE; red brown to light green, soft to firm, subblocky, trace varigated silty in part.
3300-3350	SHALE; red brown to light gray to green, continued as above. CLAYSTONE, light green, soft, blocky occasionally subwaxy, trace varigated.



## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
3350-3400	SANDSTONE; light gray to gray green, friable to firm, fine to lower medium grained, subrounded to subangular, moderately well sorted, well consolidated, commonly with medium black carbonaceous flakes, slightly calcareous matrix, no to poor visible porosity, no fluorescence stain odor or cut.
3400-3450	SHALE; red brown to brown to green, soft, platy to subblocky, occasionally fine gritty to silty, rarely waxy, varigated.
3450-3500	SANDSTONE; light gray to gray, friable to firm, fine grained, well sorted, well consolidated, abundant fine black to green occasionally red mineral inclusion, slightly calcareous, trace poor intrusive grained porosity no fluorescence stain odor or cut.
3500-3550	SHALE; red brown to green to gray, firm to soft, subblocky, occasionally silty to sandy in part. SANDSTONE; continued as above, decrease grained size, tight.
3550-3600	SANDSTONE; light gray to gray green, firm, lower fine grained to silty, poor sorted, well consolidated, black mineral inclusion, tight. SHALE; red brown continued as above.
3600-3650	SANDSTONE; off white to gray to green, firm, fine to lower fine grained, subangular, well consolidated, poor sorted, black to red mineral inclusion, calcareous, occasionally red brown SHALE parting, calcareous, tight. SHALE; red brown to gray, soft, subblocky, occasionally silty in part.
3650-3700	SANDSTONE; light gray, firm to friable, fine grained to silty, subangular, well consolidated, very fine black mineral inclusion, tight, calcareous, commonly grading to siltstone.
3700-3750	SANDSTONE; gray to dirty gray, fine grained to silty, tight, continued as above
3750-3800	SHALE; light gray to gray green, soft, subblocky, occasionally subwaxy, commonly silty in part, slightly calcareous. SANDSTONE; light gray occasionally light brown, friable to firm, very fine grained to silty, argillaceous in part, calcareous, black mineral inclusion, tight throughout, grading to sandy SILTSTONE.
3800-3850	SHALE; SHALE; red brown to dark gray, soft to firm, blocky to platy, occasionally silty in part, rarely varigated, occasionally calcareous in part.
3850-3800	SANDSTONE; gray to light gray to dirty brown, friable, fine to lower fine grained to silty, poor sorted, subangular, black mineral inclusion, occasionally argillaceous in part, commonly calcareous, commonly grading to SILTSTONE, tight throughout. SHALE; gray to dark gray to brown, soft, blocky, commonly silty in part, trace varigated.
3900-3950	SAMPLE LOST WHEN WELL WAS SHUT IN
3950-4000	SHALE; red brown to gray to gray brown, firm, blocky, commonly subwaxy, rarely varigated. SANDSTONE; off white to light gray, friable, fine grained, subrounded to subangular, predominantly silica, trace calcareous, black to green mineral inclusion, trace poor intergranular porosity, no fluorescence stain odor or cut.
4000-4050	SHALE; red brown to gray to brown, continued as above. SANDSTONE; dirty gray, firm, fine grained to silty, argillaceous in part, slightly calcareous, tight throughout.
4050-4100	SHALE; red brown to brown to gray, soft to firm subblocky, occasionally silty in part, slightly calcareous.

## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
4100-4150	SHALE; red brown to brown to gray, firm, blocky, occasionally black fissile, carbonaceous
4150-4200	SILTSTONE; light green to light gray, soft, very fine, trace varicolored SHALE parting, trace sandy in part, predominantly calcareous. SHALE; red brown continued as above, occasionally fine crystalline very calcareous.
4200-4250	SHALE; red brown to brown to light green, blocky, occasionally very splintery, waxy in part, rarely varigated. SANDSTONE; dirty brown to gray, firm to friable, fine grained to silty, poor sorted, varicolored mineral inclusion, occasionally calcareous, trace argillaceous, tight throughout.
4250-4300	SHALE; brown to dark brown to gray brown, soft to firm, blocky, subwaxy, occasionally very fine silty with black carbonaceous flakes. SANDSTONE; dirty brown to gray, friable to firm, fine grained to silty continued as above, trace brown shale parting, tight throughout.
4300-4350	SANDSTONE; off white to light gray, fair, fine to lower fine grained, subangular to sub rounded, moderately well sorted and consolidated, calcareous matrix, scattered black mineral inclusion, tight, no fluorescence stain odor or cut. SHALE; gray to green to red brown.
4350-4400	SILTSTONE; light brown to light green to gray, soft, very fine, calcareous, occasionally micro black mineral inclusion. SHALE; light green, soft, subblocky, subwaxy.
4400-4450	SHALE; light gray to green to brown, soft, blocky, occasionally platy, occasionally silty in part. SILTSTONE; continued as above, tight throughout.
4450-4500	SANDSTONE; off white to light brown, friable, very fine to lower medium grained, subrounded, poor sorted, with scattered medium grained quartz grains, black to brown mineral inclusion, predominantly silica with occasionally white calcareous matrix, tight to poor visible porosity, NSOC. LIMESTONE; brown to light brown, hard, blocky, microcrystalline, tight, trace only. SHALE; light green continued as above, trace with brown LIMESTONE partings, trace sandy in part.
4500-4550	SANDSTONE; continued as above, traces with scattered dark brown quartz grains, rarely with fair intergranular porosity, trace spotty dull yellow fluorescence, NSOC. LIMESTONE; brown to light brown, firm to hard, blocky, fine crystalline, occasionally assoc with sandy clusters, occasionally green shale partings, tight throughout. SHALE; light green to gray, soft, subblocky.
4550-4600	SANDSTONE; dirty brown to dirty gray, firm, fine to very fine grained to silty, commonly argillaceous with micro black carbonaceous inclusion, stringers, and partings, poor sorted, well consolidated, occasionally green glauconite, no visible porosity, predominantly calcareous, no fluorescence stain odor or cut. SHALE; continued as above.
4600-4650	SHALE; gray to gray green, soft to firm, blocky, subwaxy, occasionally black carbonaceous stringers, traces black, fissile, very carbonaceous.
4650-4700	SHALE; gray to brown to dark gray, firm to soft, blocky to platy, occasionally silty in part, occasionally black, splintery, subfissile, carbonaceous. SANDSTONE; off white to light gray, friable, fine to medium grained, subangular, moderately well sorted, black mineral inclusion, silica, trace poor interparticle porosity, no fluorescence stain odor or cut.

## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
4700-4750	SHALE; dark gray to gray brown, soft, blocky, subwaxy, occasionally with gray SILTSTONE stringers, rarely carbonaceous. SANDSTONE; dirty gray, firm, fine grained to silty, commonly argillaceous in part, calcareous, tight.

### **MESAVERDE 4,712' (+615')**

4750-4800	SHALE; gray to dark gray, soft, platy to blocky, occasionally subfissile silty in part, occasionally black fissile carbonaceous. SANDSTONE; white to light gray, friable, fine to lower medium grained, subangular, silica, trace slightly calcareous, trace poor intergranular porosity, no fluorescence stain odor or cut.
4800-4850	SHALE: grey to dark gray occasionally black, firm to soft, subfissile, commonly silty with black carbonaceous stringers, occasionally very carbonaceous. SANDSTONE; white to light gray, continued as above.
4850-4900	SHALE; gray to dark gray to gray brown, soft to firm, subblocky, occasionally black carbonaceous partings, trace silty in, occasionally black very carbonaceous. SANDSTONE; continued as above. oil\commonly silty with black carbonaceous partings and rarely carbonaceous stringers.
4900-4950	SANDSTONE; light gray to white to clear, predominantly unconsolidated, fine grained, subrounded to subangular, occasionally well rounded, clear to occasionally frost loose grains, possible fair to good porosity, trace dull yellow fluorescence, NSOC. SHALE; continued as above., predominantly black carbonaceous, fissile.
4950-5000	SHALE; gray to dark gray, continued as above, occasionally light green to red brown, blocky subwaxy, occasionally black fissile carbonaceous.
5000-5050	SHALE; gray to dark gray to gray green, soft to firm, platy to subblocky, occasionally silty in part, trace black carbonaceous, trace loose COAL, black vitreous brittle, vitreous. SANDSTONE; light gray to off white, friable, fine to lower medium grained, subangular, commonly with medium to coarse grained green to black mineral inclusion, slightly calcareous, no visible porosity, no fluorescence stain odor or cut.
5050-5100	SHALE; dark brown to dark gray, soft, platy to = blocky, occasionally fine silty with micro black carbonaceous inclusion, occasionally black fissile carbonaceous, traces loose COAL.
5100-5150	SANDSTONE; light to dirty gray, firm, fine grained to silty, well consolidated, subangular, abundant fine black mineral inclusion and scattered coarse carbonaceous material, occasionally with black shale parting and stringers tight throughout. SHALE; dark brown to dark gray, firm to soft, platy, commonly fine gritty to silty texture, trace loose COAL fragments.
5150-5200	SHALE; dark gray to dark brown, soft, subblocky to platy, occasionally silty in part, occasionally black carbonaceous. SANDSTONE; continued as above, abundant black carbonaceous debris.
5200-5250	SHALE; dark gray to dark brown, soft to firm, platy, predominantly silty, commonly with black carbonaceous micro inclusion and carbonaceous stringers rarely with black coal partings.

## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
5250-5300	SANDSTONE; light gray to dirty brown, firm, fine grained to silty, commonly with black SHALE parting and stringers, abundant fine black mineral inclusion, tight, no fluorescence stain odor or cut. SHALE; brown to dark brown, firm to soft, platy, commonly silty in part, trace black carbonaceous stringers.
5300-5350	SANDSTONE; continued as above, abundant silty argillaceous with black to brown SHALE stringers, tight. SHALE; brown to dark brown, soft to firm, platy, commonly with fine gritty to silty texture, occasionally sandy in part, occasionally with black carbonaceous partings.
5350-5400	SANDSTONE; white to light gray, friable medium to lower medium grained, subangular abundant black mineral inclusion, well sorted moderately well consolidated, predominantly silica with occasionally spotty calcareous matrix, trace fair intergranular porosity, no fluorescence stain odor or cut, SHALE; continued as above.
5400-5450	SANDSTONE; white to light gray, friable to firm, s to lower medium grained; subangular to sub rounded, moderately well sorted, abundant medium grained black mineral, occasionally carbonaceous inclusion, spotty white calcareous matrix. occasionally fair intergranular porosity, no fluorescence stain odor or cut. SHALE; brown to dark brown, soft, silty in part trace
5450-5500	SANDSTONE; white to light gray, friable, fine grained, continued as above, occasionally black shale stringers and parting, poor intergranular porosity, trace spotty brown to black possible dead oil stain, NFOC.
5500-5550	SANDSTONE; white to light brown to light gray, firm, fine grained to silty, very fine black to green mineral inclusion, occasionally black shale partings, calcareous, tight, no fluorescence stain odor or cut. SHALE; dark gray to dark brown, soft, platy, occasionally fissile carbonaceous, trace loose COAL, black vitreous, black.
5550-5600	SANDSTONE and SHALE continued as above, occasionally very dark gray argillaceous, trace loose COAL fragments.
5600-5650	NO SPL DUE TO EDR OUTAGE
5650-5700	SHALE; dark brown to very dark brown to black, firm to soft, sub blocky, commonly subfissile very carbonaceous with black carbonaceous material try, rarely varigated trace loose COAL fragments. SANDSTONE; white to light gray, firm to friable, fine to very fine grained, subrounded to subangular moderately well sorted, well consolidated, spotty white calcareous, abundant mineral inclusion and occasionally medium grained quartz grains, tight to poor visible porosity no fluorescence stain odor or cut
5700-5730	SANDSTONE; light brown to off white, firm, fine to lower fine grained occasionally silty, subangular, abundant micro black mineral inclusion, calcareous, no visible porosity, no fluorescence stain odor or cut
5730-5790	SHALE; dark gray to very dark brown, firm, subblocky, commonly very fine silty, occasionally black very carbonaceous, SANDSTONE; white to light brown, very fine grained, tight, continued as above
5790-5820	SHALE; very dark brown to dark gray, soft, blocky, predominantly with micro black carbonaceous inclusion commonly with black carbonaceous partings and stringers, occasional slightly silty, calcareous.

## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
5820-5850	SANDSTONE; off white to light gray, firm to friable, fine grained to lower fine grained to silty, poor sorted, gray to white calcareous matrix, abundant black mineral inclusion, trace black carbonaceous SHALE partings and stringers, no visible porosity, no fluorescence stain odor or cut
5850-5880	SHALE; dark brown, very carbonaceous, continued as above. SANDSTONE continued as above.
5880-5900	SANDSTONE; light gray friable to firm, fine to lower fine grained, subangular, well sorted, spotty white clay matrix, occasionally slightly calcareous, no visible porosity, no fluorescence stain odor or cut.
5900-5950	SANDSTONE; continued as above, occasionally coarse black mineral inclusion, occasionally carbonaceous stringers. SHALE; black to dark gray, firm to soft, platy, occasionally fissile, predominantly carbonaceous, trace loose COAL fragments, black, brittle, blocky vitreous.
5950-6000	SANDSTONE; light gray to gray, firm, fine grained to very fine grained, subangular, well sorted and consolidated, abundant black carbonaceous stringers and partings, no to poor visible porosity, no fluorescence stain odor or cut. COAL; black, brittle, vitreous, blocky, occasionally grading to carbonaceous SHALE; dark gray to black, commonly carbonaceous.
6000-6050	SHALE; black to dark gray, firm to soft, platy, fissile to subfissile, predominantly carbonaceous. COAL; black, brittle, vitreous, blocky.
6050-6100	SHALE; dark gray to dark brown to black, soft to firm, platy to subblocky, commonly with very fine gritty to silty texture, commonly carbonaceous in part.
6100-6150	SANDSTONE, dirty brown to gray, firm, very fine grained to silty, commonly argillaceous, occasionally gray to black SHALE parting and stringers, poor sorted, predominantly with gray clay matrix, occasionally S&P, silica in part, tight throughout. SHALE; dark brown to dark gray to black, firm, platy to blocky, subfissile, commonly carbonaceous, commonly silty in part. COAL, black, brittle, blocky vitreous.
6150-6200	SHALE; dark gray to brown to black, soft, platy to subblocky, commonly carbonaceous, occasionally with fine black carbonaceous inclusion, occasionally silty in part. COAL; black blocky, brittle, vitreous, occasionally fissile grading to carbonaceous SHALE. SANDSTONE; dirty gray, argillaceous, commonly silty, tight throughout.
6200-6250	SANDSTONE; off white to dirty gray to brown, firm to friable, lower medium grained to lower fine grained, subangular to subrounded, poor sorted, commonly argillaceous in part, commonly with black carbonaceous stringers and parting, black to dark gray mineral inclusion, gray non calcareous matrix, no visible porosity no fluorescence stain odor or cut. SHALE; dark gray to dark brown to black, occasionally silty, commonly carbonaceous.
6250-6300	SILTSTONE; brown to dark brown to dl gray, soft, subblocky, fine gritty to silty texture, abundant micro carbonaceous inclusion and occasionally stringers, occasionally sandy in part, tight throughout. SHALE brown to dark brown, soft, platy occasionally carbonaceous in part.
6300-6330	SANDSTONE; white, friable to firm, lower medium grained, subangular to subrounded, moderately well sorted, fine black mineral inclusion, spotty milky white non calcareous matrix, occasionally silica in part, occasionally poor to fair intergranular porosity, no fluorescence stain odor or cut. SHALE; dark gray to brown to black, commonly carbonaceous.

## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
6330-6360	SANDSTONE; white to light gray, firm to firm lower fine to medium grained, subangular, occasionally black carbonaceous inclusion, no to poor visible porosity, trace spotty bright yellow fluorescence, NSOC. SHALE; continued as above, trace COAL.
6360-6390	SHALE; dark brown to dark gray to black, firm, subblocky, commonly fine gritty to silty, abundant carbonaceous in part, SANDSTONE; continued as above, decrease amount.
6390-6420	SANDSTONE; dirty gray to white, firm to hard, fine grained to silty, scattered mineral inclusion, abundant black carbonaceous stringers and partings, gray to white non calcareous inclusion, very tight throughout, no fluorescence stain odor or cut. SHALE; continued as above.
6420-6450	SHALE; dark brown to brown, soft to firm, subblocky, predominantly fine gritty to silty grading to argillaceous SILTSTONE, abundant micro to fine black carbonaceous inclusion, stringers and partings, rarely trace coal.
6450-6480	SHALE; dark brown to dark gray to occasionally black, soft, platy, fine gritty to silty texture, micro carbonaceous inclusion continued as above.
6480-6510	SANDSTONE; off white to light gray, firm to friable, fine to lower fine grained, subangular, black mineral inclusion, well consolidated, silica in part, no visible porosity, trace black shale partings, no fluorescence stain odor or cut. SHALE; dark brown to dark gray, continued as above, trace COAL, black splintery occasionally assoc with SHALE.
6510-6540	SHALE; dark brown to dark gray, firm to soft, subblocky to platy, fine gritty to silty texture, predominantly carbonaceous in part.
6540-6570	SANDSTONE; distinct change, light brown, platy, very hard, very silica, trace well consolidated medium grained clusters with coarse coal inclusion and partings, no visible porosity throughout, no fluorescence stain odor or cut,
6570-6600	SHALE; dark gray to dark brown to black, soft, platy, sub fissile to fissile, commonly with fine gritty texture, micro carbonaceous inclusion.
6600-6630	SHALE; dark brown to dark gray to black, continued as above, trace loose coal fragments, occasionally silty in part.
6630-6660	SHALE; dark brown to dark gray to black, soft, subblocky, predominantly with fine gritty texture, abundant black carbonaceous stringers and partings. SANDSTONE; light gray to dirty brown. firm fine grained to silty, occasionally buff slightly calcareous matrix, predominantly silica, tight. trace loose Coal.
6660-6690	SHALE; dark brown to dark gray, firm to soft, subblocky, predominantly silty in part, commonly with micro carbonaceous inclusion, occasionally black carbonaceous stringers.
6690-6720	SANDSTONE; dark brown to brown, firm to hard, fine to lower medium grained, subrounded, well consolidated and sorted, silica in part, occasionally brown stained matrix, occasionally black mineral inclusion, no to poor visible porosity, no fluorescence stain odor or cut. SHALE; brown to dark brown continued as above. COAL; black, brittle, blocky, vitreous occasionally fissile, grading to carbonaceous SHALE.

## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
6720-6750	SANDSTONE; white to off white to light gray occasionally light brown, firm to friable, fine grained, subangular to subrounded, abundant black to red to green mineral inclusion, well sorted and consolidated, no calcareous, predominantly tight with trace poor intergranular porosity, no fluorescence stain odor or cut. SHALE; dark brown to dark gray, subblocky, fine gritty texture, occasionally carbonaceous.
6750-6780	SANDSTONE; brown to dirty brown, firm to hard, fine to lower medium grained, subangular, poor sorted, well consolidated, commonly with brown slightly calcareous possible dolomitic matrix, black mineral inclusion, occasionally light green to brown, waxy, varigated SHALE stringers, no visible porosity no fluorescence stain odor or cut. SHALE; dark gray to dark brown, continued as above, occasionally varicolored light green to brown, waxy rarely varigated.
6780-6810	SHALE; dark brown to dark gray, soft, subblocky, predominantly silty to fine gritty texture, trace carbonaceous in part. SILTSTONE; light brown to brown to light gray, firm, argillaceous, tight. SANDSTONE; continued as above, occasionally light gray silty, tight throughout.
6810-6840	SHALE; brown to dark brown to dark gray, continued as above, trace light green, subwaxy.
6840-6870	SANDSTONE; light gray to off white, firm to hard, fine grained to lower fine grained, subangular, well consolidated, poor to moderately well sorted, fine to micro black mineral inclusion, predominantly silica, tight throughout, no fluorescence stain odor or cut
6870-6900	SHALE; dark gray to dark brown, soft to firm, platy to subblocky, commonly with fine gritty texture, trace with light gray silty stringers, rarely carbonaceous.
6900-6930	SHALE; dark brown to dark gray to black, firm to soft, fine gritty texture, occasionally micro carbonaceous increase.
6930-6960	SHALE; dark gray to dark brown to black, continued as above.

### **CASTLEGATE 6,956' (-1,628')**

6960-6990	SHALE; dark gray to dark brown, soft, platy, commonly with fine gritty texture, micro carbonaceous inclusion, trace light green to light gray, blocky, waxy. SILTSTONE; light gray to light brown; hard, very fine, occasionally micro black mineral inclusion, occasionally black shale partings, tight.
6990-7010	SILTSTONE; dirty brown, firm, platy, occasionally fine black mineral inclusion, occasionally black SHALE partings and stringers, trace sandy in part, tight throughout. SHALE; continued as above.
7010-7020	SHALE; dark brown to dark gray, firm to soft, platy, fine gritty texture, micro carbonaceous inclusion, occasionally silty in part.
7020-7030	SANDSTONE; brown to light gray, occasionally white, fine to lower fine grained to silty, subangular to subrounded, dark brown to black mineral inclusion, well consolidated, moderately well to poor sorted, calcareous, abundant black SHALE stringers and inclusion, no visible porosity, no fluorescence stain odor or cut. SHALE; continued as above.
7030-7040	SHALE; very dark brown to dark gray, firm to soft, platy, commonly silty in part, trace fissile carbonaceous.

## SAMPLE DESCRIPTIONS

DEPTH	LITHOLOGY
7040-7050	COAL; black brittle to soft, predominantly blocky vitreous, occasionally assoc with SHALE.
7050-7060	SANDSTONE; white to light gray, friable to firm fine to lower medium grained, subangular to subrounded, moderately well sorted and consolidated, fine black mineral inclusion, silica, occasionally with black shale stringers, occasionally poor to fair intergranular porosity, no fluorescence stain odor or cut
7060-7070	SANDSTONE; continued as above, occasionally silty with gray slightly calcareous matrix, argillaceous in part, tight. SHALE; dark brown to dark gray to black, soft, occasionally carbonaceous.
7070-7080	SANDSTONE; light gray to light brown, firm to fair, fine grained to silty, subangular, poor sorted, tight, no fluorescence stain odor or cut. CLAYSTONE?: light brown, very soft, waxy, occasionally floating quartz grains, moderately bright yellow mineral fluorescence. SHALE; continued as above.
7080-7090	SHALE; dark gray to brown to black, platy, subfissile, occasionally carbonaceous. SANDSTONE; light gray, firm to hard, very fine grained to silty, calcareous, tight, no fluorescence stain odor or cut.
7090-7100	SANDSTONE; light gray, friable to firm, fine grained to silty, micro black mineral inclusion, argillaceous in part, calcareous cement, tight throughout, no fluorescence stain odor or cut.
7100-7120	SHALE; light gray to green to brown to dark gray to black, very soft, platy, splintery, subfissile, commonly waxy, occasionally with scattered quartz grains, trace black carbonaceous, trace fine gritty texture as above.
7120-7130	SHALE; gray to gray green to dark gray, soft, splintery, subwaxy, occasionally black carbonaceous, occasionally silty in part.
7130-7150	SANDSTONE; light gray to gray, friable to firm fine to lower fine grained, subangular, very fine black mineral inclusion, predominantly silica, trace calcareous cement, no to poor visible porosity, no fluorescence stain odor or cut. SHALE; varicolored, green to gray to brown to red brown, soft, blocky subwaxy to waxy, commonly dark gray to black, carbonaceous in part continued as above.
7150-7160	SANDSTONE; light gray to gray, friable to firm, fine grained to lower fine grained, well sorted and consolidated, micro black mineral inclusion, silica, no visible porosity, no fluorescence stain odor or cut. SHALE; continued as above, decrease amount varicolored, waxy.
7160-7180	SANDSTONE; light gray to dirty gray, friable, very good grained to silty, fine black mineral inclusion, black shale stringers, tight, no fluorescence stain odor or cut. SHALE; gray to dark gray to black, firm to soft, platy, subfissile, occasionally black carbonaceous, traces light green to brown, blocky waxy, rarely varigated.
7180-7200	SHALE; dark gray to dark brown to black, firm to soft, platy, occasionally splintery, subfissile commonly carbonaceous in part, trace light green to red brown, blocky, waxy, trace varigated.
7200-7210	SHALE; dark gray to dark brown, firm to soft, subplaty to subblocky, predominantly with fine gritty to silty texture, trace silty, commonly with fine black carbonaceous inclusion.

TD at 7210', 17:00 hrs, 8/25/07



**CONFIDENTIAL**

## DAILY DRILLING REPORT

USABLE FUEL 46 2 11500 = 508 4558

CUMULATIVE TIME FROM LAST REPORT: DRILLING 51 HOURS CORING \_\_\_\_\_ HOURS REAMING \_\_\_\_\_ HOURS

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DRILLER MUST FILE IN EACH SPACE BELOW WHICH IS APPLICABLE TO WORK PERFORMED DURING HIS TOUR. TOTAL FUEL STORAGE 131500 USABLE FUEL 5 30  
DRILLER MUST MAKE COMPLETE REPORT OF ANY INJURY TO AN EMPLOYEE ON HIS TOUR. EACH EMPLOYEE MUST SIGN PAYROLL RECORD ON THIS REPORT SHOWING TIME WORKED.

**DRILLER MUST** Perform the Above Without Fail!

CUMULATIVE TIME FROM LAST REPORT: DRILLING 8 1/2 HOURS-CORING \_\_\_\_\_ HOURS-REAMING \_\_\_\_\_ HOURS

TIME		DEPTH		MORNING TOUR		FORMATION AND DESCRIPTION OF WORK DONE		WT. IN 1000#	RPM	PUMP			PAYROLL RECORD				HRS.	INJURY					
FROM	TO	FROM	TO	AMOUNT						LINERS	S.P.M.	PRESS											
2300	2300				LAY DOWN DP								DRILLER	James Brown	8	TBR							
2300	2300				LAY DOWN DP								DERRICKMAN	David Webster	8	DP							
2400	0100				LAY DOWN DP								MOTORMAN	Roger Grain	8	DP							
0100	0200				LAY DOWN DP								FLOORMAN	James Cantz	8	DP							
0200	0300				LAY DOWN DP								FLOORMAN	Shawn Spartin	8	DP							
0300	0400				LAY DOWN DP																		
0400	0500				LAY DOWN DP																		
0500	0600				LAY DOWN DP																		
TOTAL WEIGHT OF DRILLING STRING								LBS.		BIT RECORD			MFG			TOTAL FTG.							
										BIT NO.			SER #			TOTAL HRS.							
										SIZE			JET SIZE			D CUT. STRUC							
										IADC CODE			DEPTH IN			U I O D L							
													DEPTH OUT	247		L B G O R							
KELLY	SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE				TALLY BOARD				LIST ALL ENGINES #1 #2 #3 LP1 LP2 DSD DST											
				CORRECT MEASUREMENT				CORRECTION PLUS MINUS FT.				DATE LAST OIL CHANGE											
COLLARS				MUD RECORD				DEVIATION DEGREES DEPTH				DRILLING TIME HOURS				CORING TIME HOURS				REAMING TIME HOURS			
STANDS				TIME	WT.	VISC.	W.L.	CAKE	P.H.	SAND	PV	MUD AND CHEMICALS ADDED				REMARKS: Safety Meeting Lay Down DC's							
SINGLES												TP AMOUNT				DPH Prints and hazards				1000-7-3500			
TOTAL																Weight 90 lbs				Amount - 1750			
LESS KELLY UP																				Amount - 7000			
TOTAL DEPTH																F-11 1:24 909.1							
TIME		DEPTH		DAY TOUR		FORMATION AND DESCRIPTION OF WORK DONE		WT. IN 1000#	RPM	PUMP			PAYROLL RECORD				HRS.	INJURY					
FROM	TO	FROM	TO	AMOUNT						LINERS	S.P.M.	PRESS											
0600					Run casing								DRILLER	CD Lester	12	PS							
													DERRICKMAN	Ruben Sanchez	12	PS							
													MOTORMAN	Byron Leatham	12	PS							
													FLOORMAN										
													FLOORMAN	Mike Jelliff	12	MS							
TOTAL WEIGHT OF DRILLING STRING								LBS.		BIT RECORD			MFG			TOTAL FTG.							
										BIT NO.			SER #			TOTAL HRS.							
										SIZE			JET SIZE			D CUT. STRUC							
										IADC CODE			DEPTH IN			U I O D L							
													DEPTH OUT			L B G O R							
KELLY	SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE				TALLY BOARD				LIST ALL ENGINES #1 #2 #3 LP1 LP2 DSD DST											
				CORRECT MEASUREMENT				CORRECTION PLUS MINUS FT.				DATE LAST OIL CHANGE											

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## DAILY DRILLING REPORT

4554

CUMULATIVE TIME FROM LAST REPORT: DRILLING 17 1/2 HOURS-CORING \_\_\_\_\_ HOURS-REAMING \_\_\_\_\_ HOURS

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MUD AND CHEMICALS ADDED															REMARKS									
STANDS	TIME	WT.	VISC.	W.L.	CAKE	P.H.	SAND	PV	YP	AMOUNT	KIND													
72	657.32											TRIP AND CONDUIT - A-Matic Forklift Hrs. P.H. 14-166												
SINGLES	12											#156 Rm 7122-53 stks W/10.700 W/400 PSI S.O. 14-154												
TOTAL	7184											J.D. Oil In Service, Table R. Chain, Dicks, Comp. Air, Comp. Pumps, Rot. Head												
LESS KELLY UP	8											J.D. BOP, BOP Lines, Air Choke Manifold Worked Kelly w/ floor valve												
TOTAL DEPTH	7176											H.H. Subst. Manifold In Working Around The Rot. Head, Covered Row												

TIME		DEPTH		AMOUNT		FORMATION AND DESCRIPTION OF WORK DONE		WT. IN 1000#	RPM	PUMP			PAYROLL RECORD		HRS.	INJURY
FROM	TO	FROM	TO							LINERS	S.P.M.	PRESS.				
7:00	3:00	7176				Drill							DRILLER	Jimmy Brown	4	J.B.N.
3:00	4:00					Drill							DERRICKMAN	David J. Hatcher	4	D.H. 110
4:00	5:00	7210	34			Drill							MOTORMAN	Bones	4	R.C. 110
5:00	6:00					Circ							FLOORMAN	James	4	J.C. 110
6:00	7:00												FLOORMAN	James	4	J.C. 110
7:00	8:00															
8:00	9:00															
9:00	10:00															

TOTAL WEIGHT OF DRILLING STRING		BIT RECORD		TOTAL FTG.	
		BIT NO.	SIZE		
160,000	LBS.	1	7 7/8	5176	
		IADC CODE	802	86	
				2034	
				7210	

KELLY		SIZE		NO.		FEET		DRILLPIPE MEASURED (IN) (OUT OF) HOLE		TALLY BOARD		CORRECTION		PLUS MINUS		LIST ALL ENGINES		DATE LAST OIL CHANGED		DST	
15	5	DCS	16	7.07	8.14																

MUD RECORD															REMARKS									
STANDS	TIME	WT.	VISC.	W.L.	CAKE	P.H.	SAND	PV	YP	AMOUNT	KIND													
72	657.32																							
SINGLES	12	X	31.19	1800	4.8	4.6																		
TOTAL	7215																							
LESS KELLY UP	5																							
TOTAL DEPTH	7210																							

Company Summit Operations LLC Field 1111 Lease 1111 Well No. 1111 Sec. 34 Twp. 10 Range 24 County Utah State Utah

Rig No. 12 This is 8 day on well, 5 day under surface, \_\_\_\_\_ day without a lost time accident. Cumulative Time: Drilling 81 hours Coring \_\_\_\_\_ hours Reaming \_\_\_\_\_ hours

Drilling Line: Make WIRE No. Lines 10 T.M. since last cut \_\_\_\_\_ Total T.M. \_\_\_\_\_ Date Sat Aug 25, 2007

USE BACK OF YELLOW SHEET FOR CALCULATIONS AND SKETCHES

MAKE SURE ALL BLANKS ARE FILLED, AND CORRECT

THIS REPORT IS FULL AND COMPLETE.

Tom Oliver TOOLPUSHER

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## TRUE DRILLING LLC

## DAILY DRILLING REPORT

DRILLER MUST FILL IN EACH SPACE BELOW WHICH IS APPLICABLE TO WORK PERFORMED DURING HIS TOUR. TOTAL FUEL STORAGE 12150 USABLE FUEL 1180 4553  
 DRILLER MUST MAKE COMPLETE REPORT OF ANY INJURY TO AN EMPLOYEE ON HIS TOUR. EACH EMPLOYEE MUST SIGN PAYROLL RECORD ON THIS REPORT SHOWING TIME WORKED.  
 DRILLER MUST Perform the Above Without Fail CUMULATIVE TIME FROM LAST REPORT: DRILLING 47 1/2 HOURS CORING HOURS REAMING HOURS

TIME		DEPTH		MORNING TOUR		WT. IN 1000#		RPM		PUMP		PAYROLL RECORD		HRS.		INJURY		
FROM	TO	FROM	TO	AMOUNT	FORMATION AND DESCRIPTION OF WORK DONE			LINERS	S.P.M.	PRESS								
7200	7200	5800	5800	72	Drk	7/15	7/14	120	120	120	120	DRILLER	Whale Johnson	8				
7200	7200				Drk							DERRICKMAN	Walter Anderson	8			JYNO	
7200	7200				Core 1/2 Work on Pass							MOTORMAN	Ross Hamilton	8			KHNO	
7200	7200				Work on Pass							FLOORMAN	Mike Nyhus	8			JYNO	
7200	7200	5800			Work on Pass							FLOORMAN	Shane Nyhus	8			JYNO	
7200	7200				Drk	4/15	5/14	120	120	120	120	BIT RECORD		MFG HRC	47 1/2			
7200	7200				Drk							SER #	711657	TOTAL FTG.	47 1/2			
7200	7200				Drk							JET SIZE	4 1/16	TOTAL HRS.	52			
7200	7200				Drk							DEPTH IN	2034	D CUT. STRUC				
7200	7200				Drk							DEPTH OUT		U I O D I L				
7200	7200				Drk							IADC CODE	P D C	L B G O R				
TOTAL WEIGHT OF DRILLING STRING 140,000 LBS.																		
KELLY		SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		CORRECTION		MINUS		FT.		LIST ALL ENGINES		#1		#2	
COLLARS		4 1/2	15	47 207	BHA-		MUD RECORD		DEVIATION		DEGREES		DEPTH		DRILLING TIME		HOURS	
STANDS		1 1/2	100	5578	TIME		WT.		VISC.		P.W.		CAKE		P.H.		SAND	
SINGLES		4 1/2	100	1	7.4		40		57%									
TOTAL				6066														
LESS KELLY UP				6	7.4		40		57%									
TOTAL DEPTH				8816														
REMARKS: ✓ C.O. 100' Depth 6066' 1 COP 57 SH. 371 PCT @ 5604 W/ 9.4 PWT 51m on Tongue Forklift Hrs. 27.9																		

TIME		DEPTH		DAY TOUR		WT. IN 1000#		RPM		PUMP		PAYROLL RECORD		HRS.		INJURY		
FROM	TO	FROM	TO	AMOUNT	FORMATION AND DESCRIPTION OF WORK DONE			LINERS	S.P.M.	PRESS								
600	700	600			Drk							DRILLER	Ralph	12			RV 11	
700	800				Drk							DERRICKMAN	Jeff Stone	12			205 NO	
800	900				Drk							MOTORMAN	Ralph Heller	12			RT NC	
900	1000				Drk							FLOORMAN	John D. Supernor	12			250	
1000	1100				Drk							FLOORMAN	James Manly	12			111 IVL	
1100	1200				Drk	12/14	12/14	120	120	120	120	BIT RECORD		MFG HRC	4406			
1200	1300				Drk							SER #	711657	TOTAL FTG.	60			
1300	1400				Drk							JET SIZE	6x16	TOTAL HRS.				
1400	1500				Drk							DEPTH IN	2034	D CUT. STRUC				
1500	1600				Drk							DEPTH OUT		U I O D I L				
1600	1700				Drk							IADC CODE	P D C	L B G O R				
TOTAL WEIGHT OF DRILLING STRING 150,000 LBS.																		
KELLY		SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		CORRECTION		MINUS		FT.		LIST ALL ENGINES		#1		#2	
COLLARS		4 1/2	15	40	BHA-		MUD RECORD		DEVIATION		DEGREES		DEPTH		DRILLING TIME		HOURS	
STANDS		1 1/2	100	5578	TIME		WT.		VISC.		P.W.		CAKE		P.H.		SAND	
SINGLES		4 1/2	100	1	7.4		40		57%									
TOTAL				6066														
LESS KELLY UP				6	7.4		40		57%									
TOTAL DEPTH				8816														
REMARKS: ✓ C.O. 100' Depth 6066' 1 COP 57 SH. 371 PCT @ 5604 W/ 9.4 PWT 51m on Tongue Forklift Hrs. 27.9																		

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MUD AND CHEMICALS ADDED															REMARKS									
STANDS	TIME	WT.	VISC.	W.L.	CAKE	P.H.	SAND	PV	YP	AMOUNT	KIND													
11	64	31.99	7.5	4.2						46.87	Gravel	Tripped Crown-H-Mark, Forklift Hrs. - 894 P.U.W. 15.												
SINGLES	12	X	31.99	7.5	4.2					46.87	Gravel	SS. C. Ring - 78 hrs #1 SPR @ 6250 15b H/W 95 gpm / 340 PSI S.O. Wt. 17.												
TOTAL		6467	11.02	9.16	4.2					31.2	Gravel	V.D. 1.1m Survel, Table, R. Chain, Dicks, Comp. Air Comps, Pumps, Koli Head.												
LESS KELLY UP		27	1.00	7.7	4.4					129.5	Gravel	M. Bot. Bot Lines, Acc. Choke Manifold Greased Blocks & Crown.												
TOTAL DEPTH		6440	3.3	9.9	4.9					10	Gravel	Hold Safety Meeting Drilling Casing Or Drill Pipe												

TIME		DEPTH		EVENING TOUR		FORMATION AND DESCRIPTION OF WORK DONE		WT. IN 1000#	RPM	FL	PUMP	PAYROLL RECORD			HRS.	INJURY	
FROM	TO	FROM	TO	AMOUNT								LINERS	S.P.N.	PRESS			
300	300	6440	6499			Drig										DRILLER Wade Upman	4
300	400					Rig V <sub>2</sub> Drig										DERRICKMAN Jason Althorn	4
400	500					Drig										MOTORMAN Ram Thompson	4
500	600	6600	160			Drig										FLOORMAN Mike Althorn	4
1900	1900	6600				Drig										FLOORMAN Shawn Althorn	4
1900	2000					Drig											
2000	2100					Drig											
2100	2200	6711	211			Drig											
TOTAL WEIGHT OF DRILLING STRING								155.000	LBS.								

KELLY		SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		TALLY BOARD		CORRECTION		LIST ALL ENGINES		DATE LAST OIL CHANGE		#1		#2		#3		LPI		LPI		DSD		DST	
COLLARS																												
11	17	6324																										
SINGLES																												
TOTAL																												
LESS KELLY UP																												
TOTAL DEPTH																												

MUD RECORD		CORRECTION		DEVIATION		DRILLING TIME		CORING TIME		HOURS		REAMING TIME		HOURS		
STANDS	TIME	WT.	VISC.	W.L.	CAKE	P.H.	SAND	PV	YP	AMOUNT	KIND					
11	17	6324														
SINGLES																
TOTAL																
LESS KELLY UP																
TOTAL DEPTH																

Company Suncoast Operations LLC Field Natural B. H. Lease 1236471 Well No. 30 Sec. 30 Twp. 10 Range 24 County Winta State W. Va.

Rig No. 22 This is 7 day on well, 4 day under surface, 2 day without a lost time accident. Cumulative Time: Drilling 67 1/2 hours Coring 0 hours Reaming 0 hours

Drilling Line: Make WRT No. Lines 13 T.M. since last cut 0 Total T.M. Fr. Aug 24th Date Fr. Aug 24th, 2007

USE BACK OF YELLOW SHEET FOR CALCULATIONS AND SKETCHES

MAKE SURE ALL BLANKS ARE FILLED, AND CORRECT

THIS REPORT IS FULL AND COMPLETE.

Tom Oliver TOOLPUSHER

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DIV. OF OIL, GAS & MINING

## DAILY DRILLING REPORT

4552

CUMULATIVE TIME FROM LAST REPORT: DRILLING 27 1/2 HOURS-CORING

\_\_\_\_ HOURS READING

**HOURS**

TIME		DEPTH		MORNING TOUR		FORMATION AND DESCRIPTION OF WORK DONE		WT. IN 1000#	RPM	PUMP	PAYROLL RECORD				HRS.	INJURY
FROM	TO	FROM	TO	AMOUNT					LINERS	S.P.M.	PRESS					
12:00	12:00	1100			Drlog							DRILLER	Woot		WV N	
					Drlog							DERRICKMAN	Bon Hank		DR HAO	
		4594	186		Drlog							MOTORMAN	Mike		MANNO	
					Shift Well End							FLOORMAN	Shane		SIVIVO	
					Logging out							FLOORMAN				
		4594			Drlog											
					Drlog											
		4405	216		Drlog											
TOTAL WEIGHT OF DRILLING STRING 23 LBS.																
KELLY		SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		TALLY BOARD		CORRECTION		LIST ALL ENGINES		DATE LAST OIL CHANGE		DSD	
COLLARS		1 1/2	46	42860	BWA		MUD RECORD		DEVIATION		DRILLING TIME		CORING TIME		REAMING TIME	
STANDS		1 1/2	46	42860	TIME	WT.	VISC.	API	CARE	P.H.	SAND	FV	MUD AND CHEMICALS ADDED		REMARKS	
SINGLES		1 1/2	X	31.97	17	9.4	12/41	560					240		Gel	
TOTAL				4805									35K		Concrete	
LESS KELLY UP				4805									35K		Concrete	
TOTAL DEPTH				4805									35K		Concrete	
TIME		DEPTH		DAY TOUR		FORMATION AND DESCRIPTION OF WORK DONE		WT. IN 1000#	RPM	PUMP	PAYROLL RECORD				HRS.	INJURY
FROM	TO	FROM	TO	AMOUNT					LINERS	S.P.M.	PRESS					
6:00	7:00	4805			Drlog							DRILLER	Red Voth		12 RV 100	
7:00	8:00				Drlog							DERRICKMAN	Jeff Stone		12 OS 10	
8:00	9:00				Drlog							MOTORMAN	Rob Heller		12 RH 10	
9:00	10:00				Drlog							FLOORMAN	John Superior		12 DS 10	
10:00	11:00				Drlog							FLOORMAN	James Monh		12 VM 100	
11:00	12:00	5204			Drlog											
12:00	1:00				Drlog											
1:00	2:00	5265			Drlog											
TOTAL WEIGHT OF DRILLING STRING 23 LBS.																
KELLY		SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		TALLY BOARD		CORRECTION		LIST ALL ENGINES		DATE LAST OIL CHANGE		DSD	
COLLARS		1 1/2	46	42860	BWA		MUD RECORD		DEVIATION		DRILLING TIME		CORING TIME		REAMING TIME	
STANDS		1 1/2	X	31.97	17	9.4	12/41	560				240		Gel		
TOTAL				4805								35K		Concrete		
LESS KELLY UP				4805								35K		Concrete		
TOTAL DEPTH				4805								35K		Concrete		

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# DIV. OF OIL, GAS & MINING



MUD RECORD															DEGREE DEPTH		DRILLING TIME		CORING TIME		REAMING TIME	
STANDS	TIME	WT.	VISC.	W.L.	CAKE	P.H.	SAND	PV	YP	AMOUNT	KIND	REMARKS	HOURS	HOURS	HOURS							
51	4207.32	30.69	2.2	35								#158K @ 4926-61 stks W/ 9.2 pps W/ 350 PSI X 0.30 in. P.W. 136										
SINGLES																						
TOTAL	5265	31.2	2.2	35								#158K @ 5204-61 stks W/ 9.4 pps W/ 400 PSI (toased black) + Crown										
LESS KELLY UP												(10) In Sumner Table R Churni Buick Comp. Air Comps. Pump. Air Hoar										
TOTAL DEPTH	5265	31.2	2.2	41								Hold Safety Meeting On Working Around Other People										

TIME		DEPTH		EVENING TOUR		FORMATION AND DESCRIPTION OF WORK DONE		WT. IN 1000#	RPM	IF	PUMP	PAYROLL RECORD		HRS.	INJURY
FROM	TO	FROM	TO	AMOUNT											
700	300	5265				Drlog						DRILLER: Whole Up...		4	
300	400					Drlog						DERRICKMAN: R...		4	
400	500					Drlog						MOTORMAN: M...		4	
500	600					Drlog						FLOORMAN: S...		4	
1200	1900	5571		706		Work On #3 M...						FLOORMAN		4	
1900	2000	5571				Drlog									
2000	2100					Drlog									
2100	2200					Drlog									
TOTAL WEIGHT OF DRILLING STRING								140							

KELLY		SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		TALLY BOARD		CORRECTION		LIST ALL ENGINES		DATE LAST OIL CHANGE		LPL		DSD		DST	
FROM	TO				MEASURED	OUT OF			PLUS	MINUS										
COLLARS	45	1.315	48707																	
MUD RECORD																				
STANDS	57	5306.2																		
SINGLES																				
TOTAL		5777																		
LESS KELLY UP																				
TOTAL DEPTH		5777																		

Company Southern Drilling Co. Inc. Field Lease 18-116-4431 Well No. 30 Sec. 30 Twp. 17N Range 24E County Watauga State NC

Rig No. 77 This is 4 day on well, 2 day under surface, 2 day without a lost time accident. Cumulative Time: Drilling 47 1/2 hours Coring 0 hours Reaming 0 hours

Drilling Line: Make 305 No. Lines 100 T.M. since last cut 0 Total T.M. 0 Date Thurs Aug 23rd, 2007

USE BACK OF YELLOW SHEET FOR CALCULATIONS AND SKETCHES

MAKE SURE ALL BLANKS ARE FILLED, AND CORRECT

THIS REPORT IS FULL AND COMPLETE.

Tom Oliver TOOLPUSHER

DRILLING RECORD

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## TRUE DRILLING LLC

DRILLER MUST FILL IN EACH SPACE BELOW WHICH IS APPLICABLE TO WORK PERFORMED DURING HIS TOUR. TOTAL FUEL STORAGE 13150 USABLE FUEL 1007  
 DRILLER MUST MAKE COMPLETE REPORT OF ANY INJURY TO AN EMPLOYEE ON HIS TOUR. EACH EMPLOYEE MUST SIGN PAYROLL RECORD ON THIS REPORT SHOWING TIME WORKED.

DAILY DRILLING REPORT  
4550

DRILLER MUST Perform the Above Without Fail

CUMULATIVE TIME FROM LAST REPORT: DRILLING \_\_\_\_\_ HOURS-CORING \_\_\_\_\_ HOURS-REAMING \_\_\_\_\_ HOURS

TIME		DEPTH		MORNING TOUR		WT. IN 1000#	RPM	PUMP			PAYROLL RECORD	HRS.	INJURY
FROM	TO	FROM	TO	AMOUNT	FORMATION AND DESCRIPTION OF WORK DONE			LINERS	S.P.M.	PRESS			
1200	1100				Pick-up Drill Pipe					DRILLER Wade Upshaw	7		
1000	1200				"					DERRICKMAN John Nelson	9		
700	1000				"					MOTORMAN Ron Hankinson	8		
100	700				"					FLOORMAN MILE NILES	8		
200	500				As-us DP 1/2 Install Rot Rother					FLOORMAN James Nyles	9		
300	200				Fill P.E. 50 Drift Cement @ 1100								
500	300				Drill Floor Cement								
600	500				Drill Floor Cement 4 1/2 Drill Cement								
TOTAL WEIGHT OF DRILLING STRING						LBS.		IADC CODE	PDC	DEPTH OUT			
KELLY						SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE	CORRECTION	PLUS MINUS	PT.	LIST ALL ENGINES
COLLARS						1 1/2	16	4870	43HA-				DATE LAST OIL CHANGE
STANDS						1 1/2	16	1563					#1 120 #2 68 #3 62
SINGLES						1 1/2	X	20.74					LP1 44 LP2 70
TOTAL													DSD DST
LESS KELLY UP								5					
TOTAL DEPTH								7084					
MUD RECORD													
MUD AND CHEMICALS ADDED													
KIND													
REMARKS:													
5/11/07 Pick-up DP													

TIME		DEPTH		DAY TOUR		WT. IN 1000#	RPM	PUMP			PAYROLL RECORD	HRS.	INJURY
FROM	TO	FROM	TO	AMOUNT	FORMATION AND DESCRIPTION OF WORK DONE			LINERS	S.P.M.	PRESS			
600	700	2080			Drill Cmt 1/2 (2039-2080) Drill 1/2					DRILLER Rob Voth	12		
700	800				Drill					DERRICKMAN Jeff Stone	12		
800	900	2163			Drill 1/2 Survey 1/2					MOTORMAN Rob Heller	12		
900	1000				Drill					FLOORMAN John D. Supernor	12		
1000	1100				Drill					FLOORMAN James Manly	12		
1100	1200				Drill								
1200	1000				Drill								
1000	200	2654			Drill 1/2 Rig Service 1/2								
TOTAL WEIGHT OF DRILLING STRING						100,000	LBS.		IADC CODE	PDC	DEPTH OUT		
KELLY						SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE	CORRECTION	PLUS MINUS	PT.	LIST ALL ENGINES
COLLARS						1 1/2	16	4870	43HA-				DATE LAST OIL CHANGE
STANDS						1 1/2	16	1563					#1 120 #2 68 #3 62
SINGLES						1 1/2	X	20.74					LP1 44 LP2 70
TOTAL													DSD DST
LESS KELLY UP								5					
TOTAL DEPTH								7084					
MUD RECORD													
MUD AND CHEMICALS ADDED													
KIND													
REMARKS:													
5/11/07 Pick-up DP													

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## DIV. OF OIL, GAS & MINING

## 4549

CUMULATIVE TIME FROM LAST REPORT: DRILLING \_\_\_\_\_ HOURS-CORING \_\_\_\_\_ HOURS-REAMING \_\_\_\_\_ HOURS

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**DAILY DRILLING REPORT**  
**4548**

4548

CUMULATIVE TIME FROM LAST REPORT: DRILLING \_\_\_\_\_ HOURS CORING \_\_\_\_\_ HOURS REAMING \_\_\_\_\_ HOURS

TIME		DEPTH		MORNING TOUR		WT. IN 1000#		RPM		PUMP			PAYROLL RECORD				HRS.		INJURY			
FROM	TO	FROM	TO	AMOUNT	FORMATION AND DESCRIPTION OF WORK DONE	WT. IN 1000#	RPM	LINERS	S.P.M.	PRESS	PAYROLL RECORD				HRS.	INJURY						
13:00					Re-up						DRILLER Rod Williams (Car-700)				7							
											DERRICKMAN Jack H. Williams				7							
											MOTORMAN Ben Hanks				7	RV NO						
											FLOORMAN M. K. Nye				7	RV NO						
											FLOORMAN Sharr Nye				7	RV NO						
										BIT RECORD			MFG				TOTAL FTG.					
										BIT NO.			SER #				TOTAL HRS.					
										SIZE			JET SIZE				D CUT. STRUC					
										IADC CODE			DEPTH IN				U I O D L					
													DEPTH OUT				L B G O R					
TOTAL WEIGHT OF DRILLING STRING										LBS.												
KELLY		SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE	TALLY BOARD		CORRECTION		PLUS	MINUS	FT.	LIST ALL ENGINES #1				#2	#3	LP1	LP2	DSD	DST
COLLARS					CORRECT MEASUREMENT			DEVIATION				HOURS		CORING TIME		HOURS		REAMING TIME		HOURS		
STANDS					TIME	WT.	VISC.	W.L.	CAKE	P.H.	SAND	PV	YP	AMOUNT	KIND	REMARKS:						
SINGLES																						
TOTAL																						
LESS KELLY UP																						
TOTAL DEPTH																						
TIME		DEPTH		DAY TOUR		WT. IN 1000#		RPM		PUMP			PAYROLL RECORD				HRS.		INJURY			
FROM	TO	FROM	TO	AMOUNT	FORMATION AND DESCRIPTION OF WORK DONE	WT. IN 1000#	RPM	LINERS	S.P.M.	PRESS	PAYROLL RECORD				HRS.	INJURY						
6:00	7:00				Rig Up						DRILLER Rod Voth Car-300				13	RV NO						
											DERRICKMAN Jeff Stone				13	RV NO						
											MOTORMAN Rob Heller				13	RV NO						
											FLOORMAN John A. Suber				13							
											FLOORMAN James Ahlby				13							
										BIT RECORD			MFG				TOTAL FTG.					
										BIT NO.			SER #				TOTAL HRS.					
										SIZE			JET SIZE				D CUT. STRUC					
										IADC CODE			DEPTH IN				U I O D L					
													DEPTH OUT				L B G O R					
TOTAL WEIGHT OF DRILLING STRING										LBS.												
KELLY		SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE	TALLY BOARD		CORRECTION		PLUS	MINUS	FT.	LIST ALL ENGINES #1				#2	#3	LP1	LP2	DSD	DST

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COLLARS		MUD RECORD										DEGREES DEPTH		DRILLING TIME		CORING TIME		REAMING TIME		HOURS	
STANDS	TIME	WT.	VISC.	W.L.	CAKE	P.H.	SAND	PV	YP	AMOUNT	KIND										
REMARKS:																					
TOTAL																					
LESS KELLY UP																					
TOTAL DEPTH																					

TIME		DEPTH		FORMATION AND DESCRIPTION OF WORK DONE										WT. IN 1000#	RPM	PUMP			PAYROLL RECORD		HRS.	INJURY				
FROM	TO	FROM	TO	AMOUNT													LINERS	S.P.M.	PRESS							
1000	1000				R.U.R.T.																					
1000	0200				Rig-up Floor Kelly																					
0200	0200				N.O.P.L.-UP																					
KEEP REPORT CLEAN																										
TOTAL WEIGHT OF DRILLING STRING LBS.																										
BIT RECORD																										
MFG																										
SER #																										
JET SIZE																										
DEPTH IN																										
DEPTH OUT																										
TOTAL FTG.																										
TOTAL HRS.																										
D CUT. STRUC																										
U I O D L																										
L B G O R																										

KELLY	SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		TALLY BOARD		CORRECTION		FLUB MINUS		LIST ALL ENGINES		#1	#2	#3	LP1	LP2	DSD	DST	
				CORRECT MEASUREMENT								DATE LAST OIL CHANGE									
MUD RECORD																					
DEVIATION																					
DEGREES DEPTH																					
DRILLING TIME																					
HOURS																					
CORING TIME																					
HOURS																					
REAMING TIME																					
HOURS																					
REMARKS:																					
TOTAL																					
LESS KELLY UP																					
TOTAL DEPTH																					

Company Summit-Operating LLC Field Natural Buttes Lease UTU66421 Well No. 30 Sec. 30 Twp. 10S Range 24E County Hatch State Utah

Rig No. 22 This is 2nd day on well, \_\_\_\_\_ day under surface, \_\_\_\_\_ day without a lost time accident. Cumulative Time: Drilling \_\_\_\_\_ hours Coring \_\_\_\_\_ hours Reaming \_\_\_\_\_ hours

Drilling Line: Make WRT No. Lines 10 T.M. since last cut \_\_\_\_\_ Total T.M. \_\_\_\_\_ Date 20th Aug 19th 2007

USE BACK OF YELLOW SHEET FOR CALCULATIONS AND SKETCHES

MAKE SURE ALL BLANKS ARE FILLED, AND CORRECT

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DRILLING TIME REC

DRILLING TIME REC

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## TRUE DRILLING LLC

## DAILY DRILLING REPORT

4547

DRILLER MUST FILL IN EACH SPACE BELOW WHICH IS APPLICABLE TO WORK PERFORMED DURING HIS TOUR. TOTAL FUEL STORAGE \_\_\_\_\_ USABLE FUEL \_\_\_\_\_  
DRILLER MUST MAKE COMPLETE REPORT OF ANY INJURY TO AN EMPLOYEE ON HIS TOUR. EACH EMPLOYEE MUST SIGN PAYROLL RECORD ON THIS REPORT SHOWING TIME WORKED.

DRILLER MUST Perform the Above Without Fail

CUMULATIVE TIME FROM LAST REPORT: DRILLING \_\_\_\_\_ HOURS-CORING \_\_\_\_\_ HOURS-REAMING \_\_\_\_\_ HOURS

TIME		DEPTH		MORNING TOUR		WT.	RPM	PUMP			PAYROLL RECORD		HRS.	INJURY
FROM	TO	FROM	TO	AMOUNT	FORMATION AND DESCRIPTION OF WORK DONE	IN 1000#		LINERS	S.P.M.	PRESS				
7:00	7:00				MAINT & RIG UP						DRILLER C.D. LASTER (CAR 450)	12	PM	
											DERRICKMAN R. SANCHEZ	12	PM	
											MOTORMAN GREG ECKERT	12	PM	
											FLOORMAN BYRON LEATHAM	12	PM	
											FLOORMAN MICHAEL JOLLIFF	12	PM	
TOTAL WEIGHT OF DRILLING STRING LBS.						BIT RECORD		MFG		TOTAL FTG.				
						BIT NO.		SER #		TOTAL HRS.				
						SIZE		JET SIZE		D CUT. STRUC				
						IADC CODE		DEPTH IN		U I O D L				
						DEPTH OUT		L B G O R						
KELLY	SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		TALLY BOARD		CORRECTION PLUS MINUS		LIST ALL ENGINES #1 #2 #3		LP1 LP2 DSD DST		
COLLARS				MUD RECORD		DEVIATION DEGREE DEPTH		DRILLING TIME HOURS		CORING TIME HOURS		REAMING TIME HOURS		
STANDS				TIME	WT.	VISC.	W.L.	CARE	P.M.	SAND	PV	YP	AMOUNT	KIND
SINGLES														
TOTAL														
LESS KELLY UP														
TOTAL DEPTH														
TIME		DEPTH		DAY TOUR		WT.	RPM	PUMP			PAYROLL RECORD		HRS.	INJURY
FROM	TO	FROM	TO	AMOUNT	FORMATION AND DESCRIPTION OF WORK DONE	IN 1000#		LINERS	S.P.M.	PRESS				
7:00	7:00				MAINT & RIG UP						DRILLER Tommy Brown (car 320)	12	PM	
											DERRICKMAN David Webster	12	PM	
											MOTORMAN Roger Crain	12	PM	
											FLOORMAN JAMES (AUTV)	12	PM	
											FLOORMAN STANLEY SPILLIN	12	PM	
TOTAL WEIGHT OF DRILLING STRING LBS.						BIT RECORD		MFG		TOTAL FTG.				
						BIT NO.		SER #		TOTAL HRS.				
						SIZE		JET SIZE		D CUT. STRUC				
						IADC CODE		DEPTH IN		U I O D L				
						DEPTH OUT		L B G O R						
KELLY	SIZE	NO.	FEET	DRILLPIPE MEASURED (IN) (OUT OF) HOLE		TALLY BOARD		CORRECTION PLUS MINUS		LIST ALL ENGINES #1 #2 #3		LP1 LP2 DSD DST		
DATE LAST OIL CHANGE														

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DIV. OF OIL, GAS &amp; MINING



**From:** "Kristi Higgs" <kristi@summitcorp.net>  
**To:** <dianawhitney@utah.gov>  
**Date:** 9/23/2008 8:51 AM  
**Subject:** Federal H 34-30 Well

Hi Diana,

105 24E 30

The Federal H 34-30 well, API # 43-047-38883, operated by Summit Operating, LLC is located on the Federal lease # UTU-66421. The Lease that is currently on record (UTU-77658) is the right-of-way lease for the gas pipeline to the Federal 34-30 well, so the lease needs to be changed to the UTU-66421 lease, as this is the lease that the well is actually on. Thanks for your help.

Kristi Higgs

Operations

Summit Operating, LLC

435-940-9001

kristi@summitcorp.net

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

DIV. OF OIL, GAS &amp; MINING

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JUL 18 2013

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

## SUNDRY NOTICES AND REPORTS ON WELLS

**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**5. Lease Serial No.  
UTU-664216. If Indian, Allottee or Tribe Name  
NA

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other2. Name of Operator  
Summit Operating, LLC3a. Address  
1245 Brickyard Road, Suite 210  
Salt Lake City, UT 841063b. Phone No. (include area code)  
435-940-90017. If Unit of CA/Agreement, Name and/or No.  
NA8. Well Name and No.  
FED H 34-309. API Well No.  
43-047-3888310. Field and Pool or Exploratory Area  
Natural Buttes4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SWSE, Sec. 30, T10S, R24E, SLM  
602' FSL, 2088' FEL11. Country or Parish, State  
Utah, Utah

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Summit Operating, LLC is requesting permission to recompleate this well in the Wasatch formation, work includes perforating and stimulating a zone from 4488' - 4544'. After recompleation, comingling the resulting production with existing production in the Mesa Verde Formation is requested. A detailed recompleation procedure is attached.

Note that the Composite Frac Plug (CFP) being used to isolate the depleted Mesa Verde from the higher pressure Wasatch will allow flow up from the Mesa Verde but not flow down from the Wasatch to the Mesa Verde. Plans are to remove the CFP after pressures in the two formations equalize for unrestricted comingling flow.

**REQUEST DENIED**  
Utah Division of  
Oil, Gas and Mining

Date: 7/22/2013

By: [Signature]

\* insufficient information provided to be able to approve request  
see requirements of 2649-3-22. Future submittals should  
be submitted via the epermit system.

COPY SENT TO OPERATOR

Date: 7.29.2013

Initials: KS

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
Crystal Hammer

Title Geology Technician

Signature [Signature]

Date 07/16/2013

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)



RECEIVED

JUL 18 2013

DIV. OF OIL, GAS & MINING

**Summit Operating, LLC  
Recompletion Procedure**

**Federal H 34-30**

**Natural Buttes Field**

Purpose: Recomplete in Wasatch.

PERTINENT INFORMATION

Location: 602' FSL, 2088' FEL (SWSE)  
Section 30, Township 10 South, Range 24 East  
Uintah County, Utah

Elevation: 5312' GL, 5327' KB

TD: 7211'

PBTD: 6390' (CBP)

API No.: 43-047-38883

Casing: 9-5/8", 36.0#, J-55, ST&C @ 2032', cemented to surface  
4-1/2", 11.6#, I-80, LT&C @ 7211', cemented with 130 Bbls H-Fill and 230 Bbls Poz-Prem

Wellhead: Tubing Head Flange – 11" 5M x 7-1/16" 5M, 2-3/8" 8rd top thread on hanger

Tubing: 5855' of 2-3/8", 4.7#, J-55, EUE, 8rd

Production Casing Specs: 4-1/2", 11.6#, I-80, LT&C, 8rd, ID: 4.000" Drift: 3.875"  
Collapse: 6350 psi Burst: 7780 psi (70% 5446 psi)

Tubing Specs: 2-3/8", 4.7#, J-55?, EUE, 8rd, ID: 1.995" Drift: 1.901"  
Collapse: 11,780 psi Burst: 11,200 psi (80% 8960 psi)  
Joint: 104,000 lbs (70% 72,800 lbs)

Capacities: 4-1/2", 11.6#: 0.0155 Bbls/ft 0.0873 ft<sup>3</sup>/ft  
2-3/8", 4.7# 0.00387 Bbls/ft 0.0217 ft<sup>3</sup>/ft  
4-1/2" x 2-3/8" 0.0101 Bbls/ft 0.0565 ft<sup>3</sup>/ft

BH Temperature: 135 °F @ 4500'

Current Mesa Verde Completion Interval: 5898' – 6202'

Proposed Wasatch Formation Completion Interval: 4488' – 4544'

Proposed New Perforations:

4488' – 4499', 11', 33 holes  
4526' – 4538' and 4540' – 4544', 16', 48 holes

Perforation Depths are referenced to Halliburton SDL-DSN-GR dated 08/26/07.



## PROCEDURE

1. Check dead men and prepare location for workover. Spot a clean 500 Bbl tank and partially fill it with 250 Bbls of 2% KCl water. Mix 5.25 gallons (250 ppm) Baker Petrolite XC102W biocide, 1.25 gallons (60 ppm) OSW5200 Oxygen Scavenger, and 21 gallons (1000 ppm) Baker Petrolite WAW 3003 non-ionic surfactant to the tank and use fluid from this tank for kill fluid. Equivalent chemical from other sources can be substituted.
2. MIRUSU. Catch plunger at surface. Reverse circulate kill fluid, disconnect flow lines, ND wellhead, and NU BOP.
3. POOH with tubing.
4. PU tubing as needed and round trip a 3-7/8" bit and 4-1/2" (11.6#) casing scraper to CBP at 6390'.

Note: If hydraulic fracturing service is not scheduled to avoid service rig waiting time, lay down tubing and RDMO service unit. Wireline and fracture stimulation service will be done without rig and service rig will be moved in to rerun tubing. Decision whether to leave BOP on well or replace it with frac valve will be made based on pumping and rig service timing.

5. Spot three more clean 500 Bbl tanks and fill all three frac tanks with fresh water. Mix biocide recommended by selected hydraulic fracturing service company in all three tanks. Install an anchored 2" flowback line with choke from the casing to one of the three frac tanks.
6. RU wireline service. Run and wireline set a 4-1/2" (11.6#) composite frac plug (CFP) at 5875'. Perforate the intervals at 4488' – 4499' (11'), 4526' – 4538' (12') and 4540' – 4544' (4') with 0.5" diameter holes using 3-1/8" hollow carriers loaded 3 SPF on 120° phasing and 19 gram charges. RD and release wireline unit.
7. RU pumping service to fracture stimulate the Wasatch interval at 4488' – 4544' as follows:  
Materials: 1500 Bbls of fresh water at 90 °F  
90,000 lbs 20/40 mesh sand  
Fluid additives per Service Company recommendation

Use hot oiler or super heater to heat water in all three tanks to 90 °F. Install wellhead isolation tool (if needed) and pump fracture stimulation as follows with a maximum pressure of 5000 psi and maximum rate of 30 BPM:

- a. Initiate injection and ramp rate up to 30 BPM while pumping 2500 gallons of linear gel. Shut down and record ISIP.
- b. Pump 11000 gallons pad fluid.
- c. Pump 6850 gallons of fluid with 1 ppg sand.
- d. Pump 6850 gallons of fluid with 2 ppg sand.
- e. Pump 6000 gallons of fluid with 3 ppg sand.
- f. Pump 9000 gallons of fluid with 4 ppg sand.
- g. Pump 3150 gallons of fluid with 5 ppg sand.
- h. Pump 2920 gallons of flush.
- i. Shut down and record ISI, 5, 10, and 15 minute pressures.
8. Remove wellhead isolation tool. Start controlled flow back at less than 1.0 BPM to bleed back pressure.
9. RD and release service company.
10. Continue to flow well for cleanup until well dies or it is capable of flowing gas at commercial rates.
11. Kill well as needed to install BOP and start running tubing.

12. With stripping rubber in place, RIH with a 2-3/8" pump-out plug (w/ aluminum plug), one joint of 2-3/8" tubing, 2-3/8" x 1.875" ID X-nipple, and 2-3/8" tubing. Land tubing at ~4480'.
13. ND BOP and NU wellhead.
14. Use rig pump to pressure tubing and shear the pump-out plug.
15. RU and swab tubing as necessary to initiate flow. Turn well to production.
16. RDMO service unit.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-77658			
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>			
<b>2. NAME OF OPERATOR:</b> SUMMIT OPERATING, LLC		<b>7. UNIT or CA AGREEMENT NAME:</b>			
<b>3. ADDRESS OF OPERATOR:</b> 1245 Brickyard Road, Suite 210, Salt Lake City, UT, 84106		<b>8. WELL NAME and NUMBER:</b> FEDERAL H 34-30			
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0602 FSL 2088 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 30 Township: 10.0S Range: 24.0E Meridian: S		<b>9. API NUMBER:</b> 43047388830000			
<b>10. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES		<b>COUNTY:</b> UINTAH			
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		<b>STATE:</b> UTAH			
<b>TYPE OF SUBMISSION</b>  <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>8/30/2013</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<b>TYPE OF ACTION</b>  <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION          OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
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<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> Summit Operating, LLC is requesting permission to recomplete this well in the Wasatch formation, work includes perforating and stimulating a zone from 4488' - 4544'. After recompletion, comingling the resulting production with existing production in the Mesa Verde Formation is requested. A detailed recompletion procedure, lease plat showing contiguous leases, and an affidavit attesting to the notification of all contiguous lease holders is attached. Note that the Composite Frac Plug (CFP) being used to isolate the depleted Mesa Verde from the higher pressure Wasatch will allow flow up from the Mesa Verde but not flow down from the Wasatch to the Mesa Verde. Plans are to remove the CFP after pressures in the two formations equalize for unrestricted comingled flow.					
<b>NAME (PLEASE PRINT)</b> Crystal Hammer		<b>PHONE NUMBER</b> 435 940-9001			
<b>SIGNATURE</b> N/A		<b>TITLE</b> Geo Tech			
<b>DATE</b> 8/21/2013		<b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> September 19, 2013 <b>By:</b>			

**Summit Operating, LLC  
Recompletion Procedure**

**Federal H 34-30**

**Natural Buttes Field**

Purpose: Recomplete in Wasatch.

PERTINENT INFORMATION

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Section 30, Township 10 South, Range 24 East  
Uintah County, Utah

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PBTD: 6390' (CBP)

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Collapse: 6350 psi Burst: 7780 psi (70% 5446 psi)

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### PROCEDURE

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3. POOH with tubing.
4. PU tubing as needed and round trip a 3-7/8" bit and 4-1/2" (11.6#) casing scraper to CBP at 6390'.

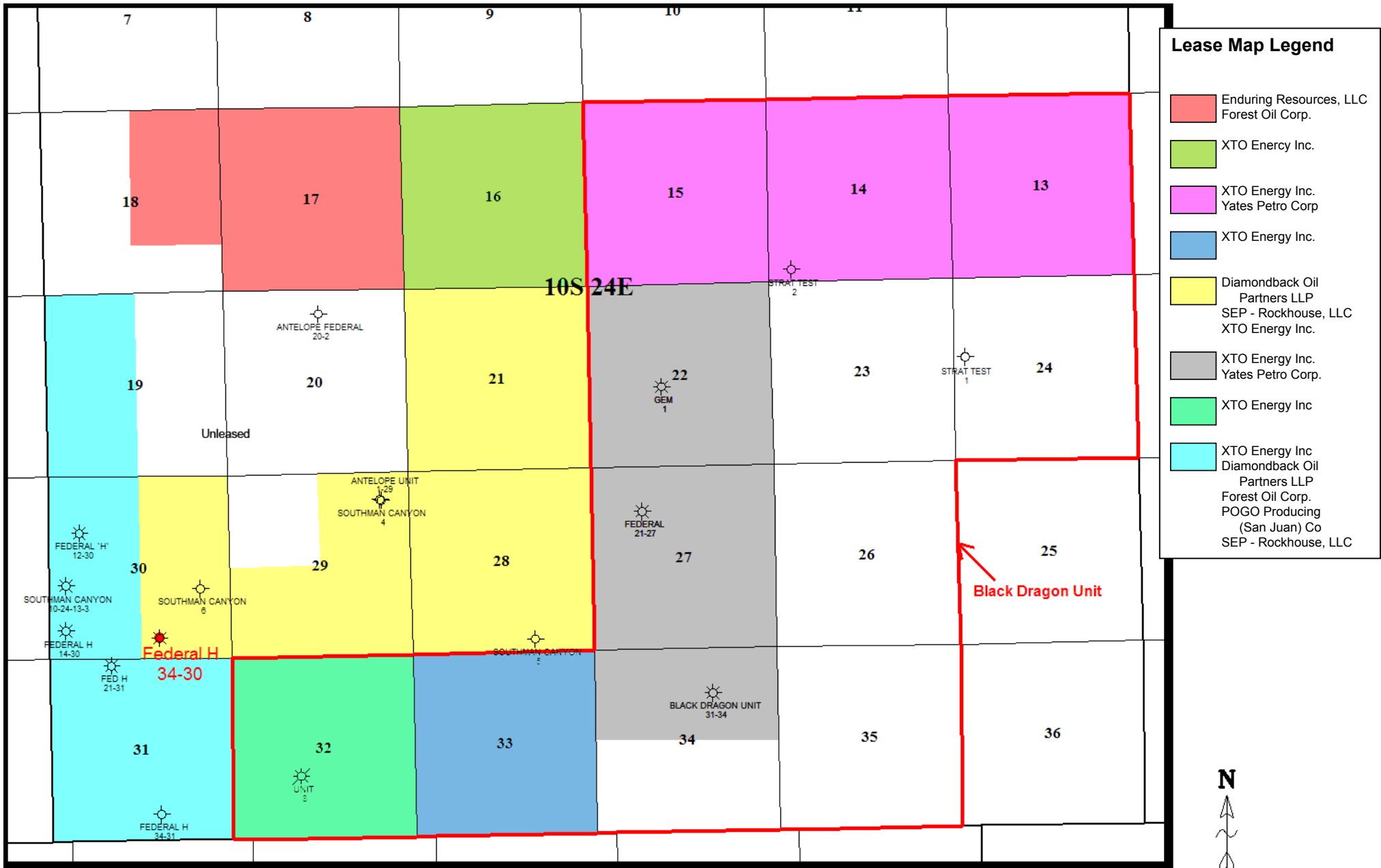
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Fluid additives per Service Company recommendation

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16. RDMO service unit.



0.5000 0 0.5000 1 1.5000 mi

1:48000

**SEP - Rockhouse, LLC**

**Federal H 34-30  
Uintah County, Utah**

**Author:**  
Crystal Hammer

**Scale:**  
1:48000

**Date:**  
14 August, 2013

**RECEIVED:** Aug. 21, 2013

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## AFFIDAVIT

STATE OF UTAH       }  
                              }ss  
County of Salt Lake   }

COMES NOW, Crystal Hammer, (hereinafter referred to as "Affiant"), on behalf of Summit Operating, LLC (hereinafter referred to as "Summit"), whose address is 1245 E. Brickyard Drive, #210, Salt Lake City, Utah, 84106, the current Operator of the Federal H 34-30 well located in SW ¼ SE ¼, Section 30, Township 10 South, Range 24 East, SLM, Uintah County, Utah (hereinafter referred to as the "Well"), being first duly sworn upon oath, affirms, deposes and says the following:

1. Affiant is a citizen of the United States of America and is over 21 years of age;
2. Affiant, or persons under the direction and control of Affiant, on behalf of the Summit has prepared and submitted, or is submitting an application to commingle production from the Wasatch formation with production from the Mesa Verde formation in the Well (hereinafter referred to as the "Application");
3. Those persons and entities listed on Exhibit A represent all of the owners of the contiguous oil and gas leases or drilling units overlying the pool as described in the Application;
4. Affiant, or persons under the direction and control of the Affiant, has caused a copy of the Application to be mailed by certified United States Mail, postage prepaid, return receipt requested, to each of the parties listed on Exhibit A;

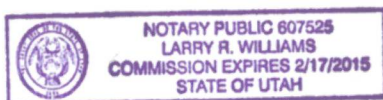
Further the Affiant sayeth not.

Dated: August 21<sup>st</sup>, 2013

  
\_\_\_\_\_  
Crystal Hammer, Affiant

### JURAT

Subscribed to and sworn before me this 21<sup>st</sup> day of August, 2013.



  
\_\_\_\_\_  
Notary Public



Notices Mailed to the Following:

Enduring Resources II LLC  
511 16<sup>th</sup> St. Ste 700  
Denver, CO 80202

Forest Oil Corp  
707 17<sup>th</sup> St. #3600  
Denver, CO 80202

XTO Energy Inc.  
810 Houston St. #200  
Fort Worth, TX 76102

Yates Petro Corp  
105 S. Fourth St.  
Artesia, NM 88210

Enduring Resources LLC  
511 16<sup>th</sup> St. Ste 700  
Denver, CO 80202

Diamondback Oil Partners LLP  
5990 Kipling Pkwy #201  
Arvada, CO 80004

POGO Producing (San Juan) Co  
PO Box 10340  
Midland, TX 79702

SEP – Rockhouse, LLC  
1245 Brickyard Rd., Ste 210  
Salt Lake City, UT 84106

Asphalt Wash : UTU-65371  
T10S-R24E Sec. 19: W/2, Sec. 30: All, Sec. 31: All  
CONTIGUOUS LEASES

Description	Lease #	Lessor	Lessee(s)/WI OWNERS	Address 1	Address 2	UNIT INFO
T10S-R23E						
Sec. 24: E/2NE, NWNE	UTU-75109	USA	YATES PETRO CORP	105 S. FOURTH ST.	ARTESIA, NM 88210	
Sec. 24: W/2, SE/4, SWNE	UNLEASED	USA				
Sec. 25: ALL	UNLEASED	USA				
Sec. 36: ALL	UNLEASED	USA				
T11S-R23E						
Sec. 1: N/2N/2	UNLEASED	USA				
T10S-R24E						
Sec. 18: W/2, S/2SE	UTU-75121	USA	XTO ENERGY INC	810 HOUSTON ST #200	FORT WORTH, TX 76102	
Sec. 19: E/2	UNLEASED	USA				
Sec. 30: E/2	UTU-66421	USA	DIAMONDBACK OIL PARTNERS, LLP	5990 KIPLING PKWY #201	ARVADA, CO 80004	
			SEP - ROCKHOUSE, LLC	1245 BRICKYARD RD., STE 210	SALT LAKE CITY, UT 84106	
			XTO ENERGY INC.	810 HOUSTON ST #200	FORT WORTH, TX 76102	
Sec. 32: ALL	UTU-73701	USA	XTO ENERGY INC.	810 HOUSTON ST #200	FORT WORTH, TX 76102	BLACK DRAGON UNIT
	UTU-76780X	USA	ENDURING RESOURCES LLC	511 16TH ST. STE 700	DENVER, CO 80202	
T11S-R24E						
Sec. 6: Lots 1-5, 7-9 S/2NE, SENW	UTU-73919	USA	ENDURING RESOURCES II LLC	511 16TH ST., STE 700	DENVER, CO 80202	ASPHALT UNIT
	UTU-84718X	USA	ENDURING RESOURCES LLC	511 16TH ST., STE 700	DENVER, CO 80202	

API Well Number: 43047388830000

Form 3160-4  
(August 2007)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECOMPLETION

FORM APPROVED  
OMB NO. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well    Oil Well    Gas Well    Dry    Other b. Type of Completion:    New Well    Work Over    Deepen    Plug Back <span style="background-color: yellow;">Diff. Resvr.,</span> Other: _____								5. Lease Serial No.	
								6. If Indian, Allottee or Tribe Name	
2. Name of Operator								7. Unit or CA Agreement Name and No.	
3. Address						3a. Phone No. (include area code)		8. Lease Name and Well No.	
4. Location of Well (Report location clearly and in accordance with Federal requirements)*  At surface   At top prod. interval reported below   At total depth								9. API Well No.	
								10. Field and Pool or Exploratory	
								11. Sec., T., R., M., on Block and Survey or Area	
14. Date Spudded						15. Date T.D. Reached		16. Date Completed D & A Ready to Prod.	
18. Total Depth:    MD    TVD				19. Plug Back T.D.:    MD    TVD		20. Depth Bridge Plug Set:    MD    TVD		17. Elevations (DF, RKB, RT, GL)*	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)						22. Was well cored?    No    Yes (Submit analysis)			
						Was DST run?    No    Yes (Submit report)			
						Directional Survey?    No    Yes (Submit copy)			
23. Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
25. Producing Intervals									
Formation		Top		Bottom		26. Perforation Record			
						Perforated Interval		Size	No. Holes
A)									
B)									
C)									
D)									
27. Acid, Fracture, Treatment, Cement Squeeze, etc.									
Depth Interval		Amount and Type of Material							
28. Production - Interval A									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			➔						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			➔						
28a. Production - Interval B									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			➔						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			➔						

\*(See instructions and spaces for additional data on page 2)

RECEIVED: Mar. 07, 2014

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			➡						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			➡						

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			➡						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			➡						

29. Disposition of Gas (*Solid, used for fuel, vented, etc.*)

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth

32. Additional remarks (include plugging procedure):

## 33. Indicate which items have been attached by placing a check in the appropriate boxes:

Electrical/Mechanical Logs (1 full set req'd.)	Geologic Report	DST Report	Directional Survey
Sundry Notice for plugging and cement verification	Core Analysis	Other:	

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name ( <i>please print</i> ) _____	Title _____
Signature _____	Date _____

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

(Form 3160-4, page 2)

RECEIVED: Mar. 07, 2014

## INSTRUCTIONS

**GENERAL:** This form is designed for submitting a complete and correct well completion/recompletion report and log on all types of wells on Federal and Indian leases to a Federal agency, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal office. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, and all types electric), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal laws and regulations. All attachments should be listed on this form, see item 33.

**ITEM 4:** Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal office for specific instructions.

**ITEM 17:** Indicate which reported elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**ITEM 23:** Show how reported top(s) of cement were determined, i.e. circulated (CIR), or calculated (CAL), or cement bond log (CBL), or temperature survey (TS).

## NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48 (d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. et seq.; 43 CFR 3160.

**PRINCIPAL PURPOSE:** The information is to be used to evaluate the actual operations performed in the drilling, completing and testing of a well on a Federal or Indian lease.

**ROUTINE USES:** (1) Evaluate the equipment and procedures used during the drilling and completing/recompleting of a well. (2) The review of geologic zones and formation encountered during drilling. (3) Analyze future applications to drill in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

**EFFECT OF NOT PROVIDING INFORMATION:** Filing of this report and disclosure of the information is mandatory once a well drilled on a Federal or Indian lease is completed/recompleted.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling and completing/recompleting wells on Federal and Indian oil and gas leases.

This information will be used to analyze operations and to compare equipment and procedures actually used with those proposed and approved.

Response to this request is mandatory only if the operator elects to initiate drilling and completing/recompleting operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-77658
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: FEDERAL H 34-30	
2. NAME OF OPERATOR: SUMMIT OPERATING, LLC	9. API NUMBER: 43047388830000	
3. ADDRESS OF OPERATOR: 1245 Brickyard Road, Suite 210, Salt Lake City, UT, 84106	PHONE NUMBER: 435 940-9001 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0602 FSL 2088 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 30 Township: 10.0S Range: 24.0E Meridian: S	COUNTY: UINTAH	
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input checked="" type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION	OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 1/28/2014				
<input type="checkbox"/> SPUD REPORT Date of Spud:				
<input type="checkbox"/> DRILLING REPORT Report Date:				

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Pulled tubing and tripped a bit and casing scraper. Tagged fill tagged at 6307'. Existing completion in the Mesa Verde at 5898'- 5930' was isolated below a composite frac plug set at 5875' and the Wasatch was perforated at 4526'- 4538', 4540'- 4544', and 4488'- 4499' with 4 spf. Static pressure survey measured 2283.6 psi and 134.4 F at 4500'. The perforations at 4488'- 4544' were fracture stimulated using 1171 Bbls of cross-linked guar gel and 92,000 lbs of 20/40 mesh sand. Well produced temporarily to sales flowing up casing before tubing was installed. Ran 2-3/8" tubing and tagged sand fill above composite frac plug at 5636'. Did not circulate sand out. Set end of tubing at 4471' and returned well to production from the Wasatch Formation. Well completed on 1/28/2014 with 24-hour rate of 805 MCF, 0 BOPD, and 24 BWPD flowing with 149 psi TP and 227 psi CP without choke.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 March 10, 2014

NAME (PLEASE PRINT) Ellis Peterson	PHONE NUMBER 435 940-9001	TITLE Sr Petroleum Engineer
SIGNATURE N/A		DATE 2/10/2014



## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production ➔	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate ➔	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production ➔	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate ➔	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (*Solid, used for fuel, vented, etc.*)

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth

32. Additional remarks (include plugging procedure):

## 33. Indicate which items have been attached by placing a check in the appropriate boxes:

Electrical/Mechanical Logs (1 full set req'd.)	Geologic Report	DST Report	Directional Survey
Sundry Notice for plugging and cement verification	Core Analysis	Other:	

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (*please print*) \_\_\_\_\_ Title \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

(Form 3160-4, page 2)

RECEIVED: Mar. 03, 2014

## INSTRUCTIONS

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The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling and completing/recompleting wells on Federal and Indian oil and gas leases.

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<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-77658			
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>			
<b>2. NAME OF OPERATOR:</b> SUMMIT OPERATING, LLC		<b>7. UNIT or CA AGREEMENT NAME:</b>			
<b>3. ADDRESS OF OPERATOR:</b> 531 East 770 North, Orem, UT, 84097		<b>8. WELL NAME and NUMBER:</b> FEDERAL H 34-30			
<b>PHONE NUMBER:</b> 801-657-5780 Ext		<b>9. API NUMBER:</b> 43047388830000			
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0602 FSL 2088 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 30 Township: 10.0S Range: 24.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES			
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH			
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>					
<b>TYPE OF SUBMISSION</b>  <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 12/1/2016  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<b>TYPE OF ACTION</b>  <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input checked="" type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION          OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input checked="" type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input checked="" type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>			
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>  <div style="text-align: center; font-size: 1.2em;">See Attached.</div> <div style="text-align: right; margin-top: 20px;"> <b>Approved by the</b>  <b>October 17, 2016</b>  <b>Oil, Gas and Mining</b>   <b>Date:</b> _____  <b>By:</b> <u>Derek Quist</u> </div>					
<b>NAME (PLEASE PRINT)</b> Ellis Peterson		<b>PHONE NUMBER</b> 801 657-5780			
<b>SIGNATURE</b> N/A		<b>TITLE</b> Sr Petroleum Engineer			
<b>DATE</b> 9/27/2016					

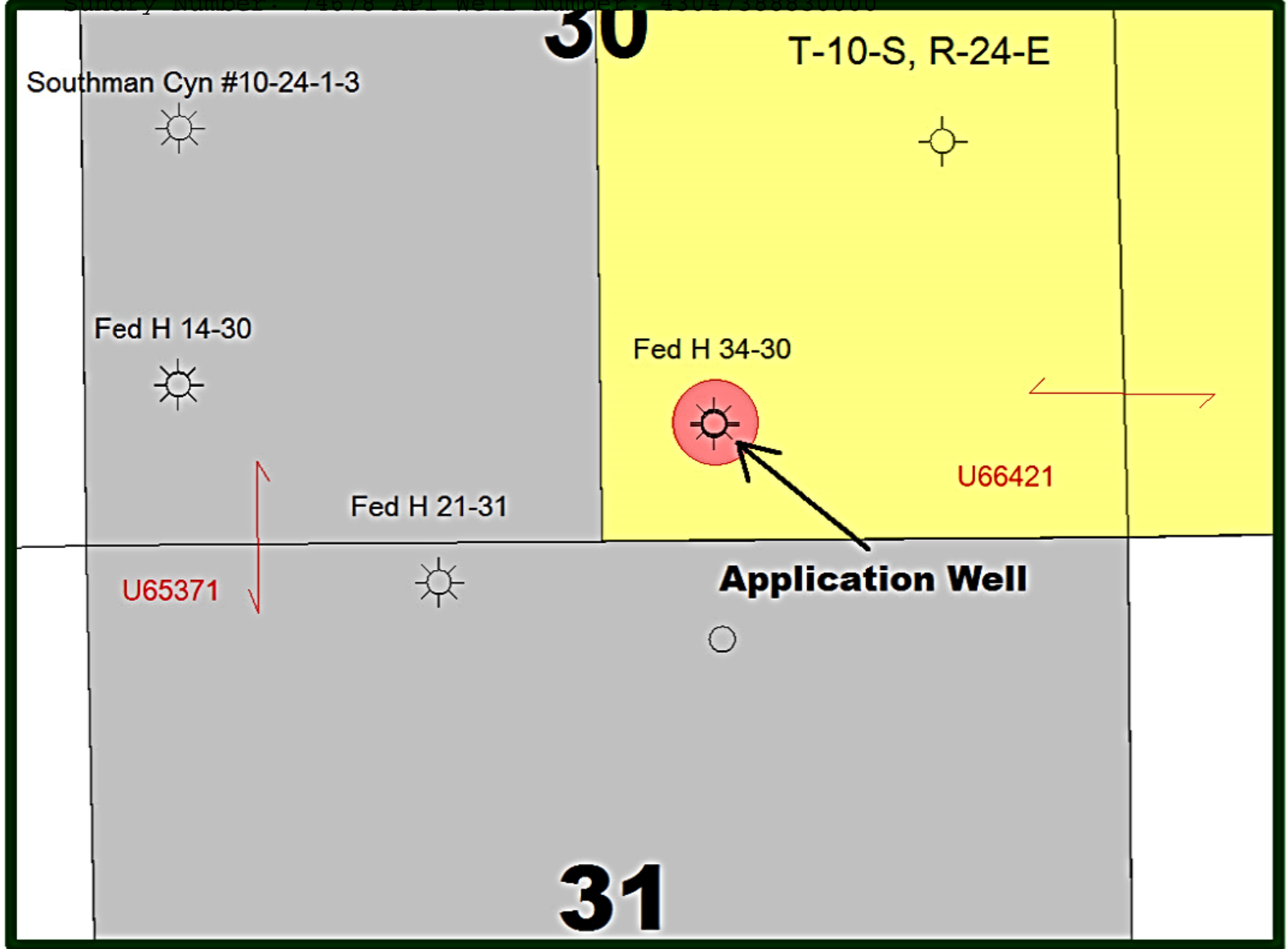


**Summit Operating, LLC**  
**Federal H 34-30**  
**API 43-047-38883**

**Comingle Request Description**

In order to prevent waste of natural gas; to protect the correlative rights of all parties concerned; to prevent the drilling of un-necessary wells; and to insure proper and efficient recovery and promote conservation of the natural gas resources of the State of Utah, Summit Operating, LLC respectfully requests approval to commingle production from the Wasatch and Mesaverde formation "pools" in the same well bore.

1. Ownership in both formations is the same. However, in the event allocation of production is necessary, that allocation will be based on the proportionate production volumes from each pool during the last full month each pool produced individually under stable conditions.
2. Both formations shall be commingled in the well bore and produced concurrently through a single string of 2-3/8" production tubing.
3. Attached is a map showing the location of wells on contiguous oil and gas leases and/or production units.
4. Also attached is an affidavit confirming that this application has been provided to leasehold owners in contiguous oil and gas leases or production pools overlying the "pool"



500 0 500 1000 1500 ft

1:11000

**Summit Operating LLC**

**Asphalt Wash Gas Field**

**Uintah County, Utah**

**Commingling Application For: Fed H 34-30**

## AFFIDAVIT OF MAILING

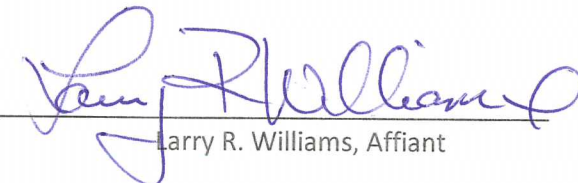
STATE OF UTAH            }  
                                  } ss.  
County of Utah            }

COMES NOW, Larry R. Williams, (hereinafter referred to as "Affiant"), being first duly sworn upon oath and deposes and says the following:

1. Affiant is a citizen of the United States of America, is over 21 years of age, currently resides in Salt Lake County, Utah, is the Land Manager and Corporate Counsel for Summit Operating, LLC (hereafter referred to as "Summit") and has personal knowledge of the facts set forth herein;
2. Summit is the Operator of the Fed H 34-30 Well which is located in the Southwest Quarter of the Southeast Quarter of Section 30, Township 10 South, Range 24 East, Uintah County, Utah.
3. Exhibit A, which is attached hereto and made a part hereof, is a map showing the location of wells located on contiguous oil and gas leases and/or drilling units in relation to the Fed H 34-30 Well. A search of the applicable records has revealed that the parties listed on Exhibit B, which is attached hereto and made a part hereof, are the only interest owners of the contiguous oil and gas leases, or the contiguous drilling units overlying the pool.
4. On September 27, 2016 Affiant mailed, or caused to be mailed, in the U.S. Mail, with postage prepaid, a copy of the attached Application for Commingling two or more pools (formations) in one well bore of the well described in Paragraph 2 above which is has been or is being filed with the State of Utah Division of Oil, Gas and Mining to each of the owners listed on Exhibit B.

Further the Affiant sayeth not.

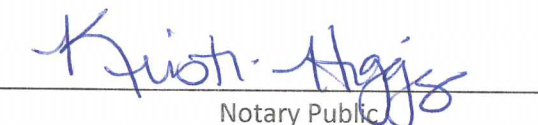
Dated: September 27, 2016

  
Larry R. Williams, Affiant

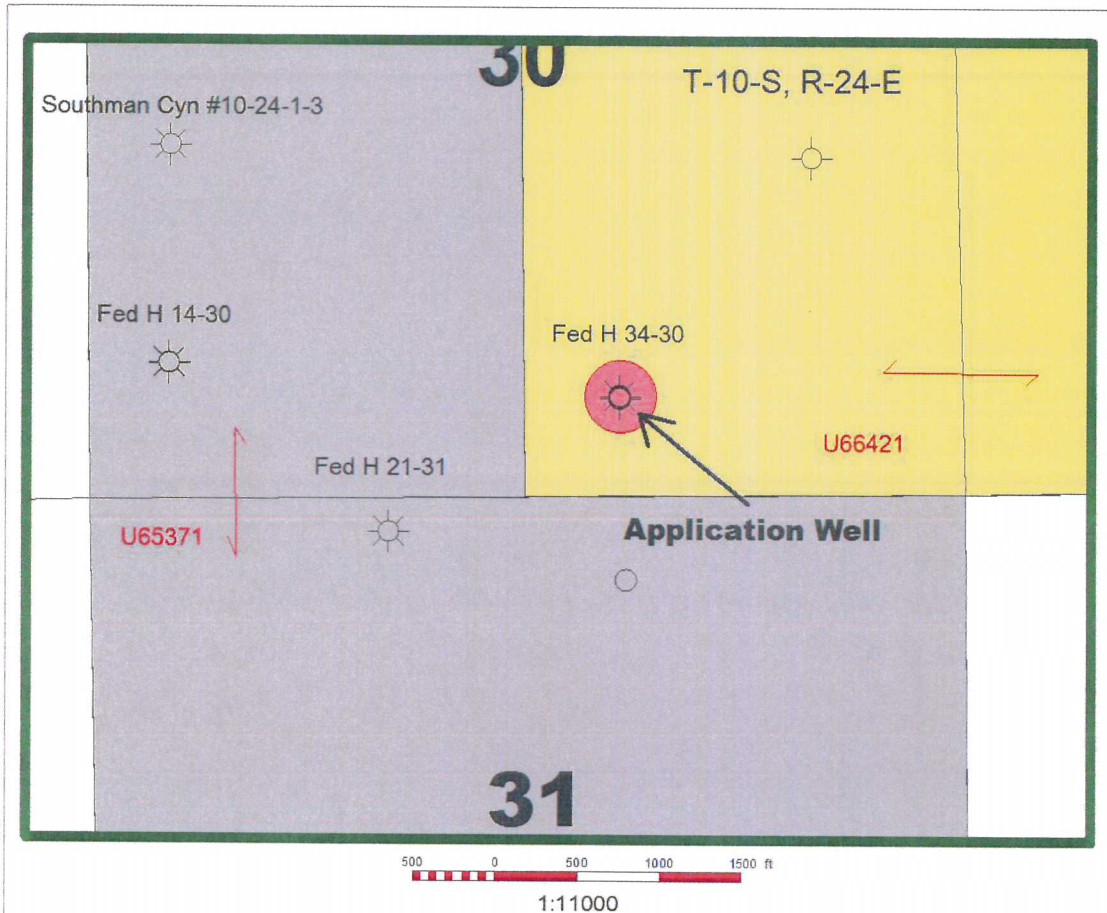
### JURAT

Subscribed to and sworn before me this 27<sup>th</sup> day of September, 2016.



  
Notary Public

## EXHIBIT A



**Summit Operating LLC**

**Asphalt Wash Gas Field**

**Uintah County, Utah**

**Commingling Application For: Fed H 34-30**

## EXHIBIT B

---

### CONTIGUOUS LEASE OR DRILLING UNIT OWNERS

SEP – Rockhouse, LLC  
531 E 770 N  
Orem, UT 84097

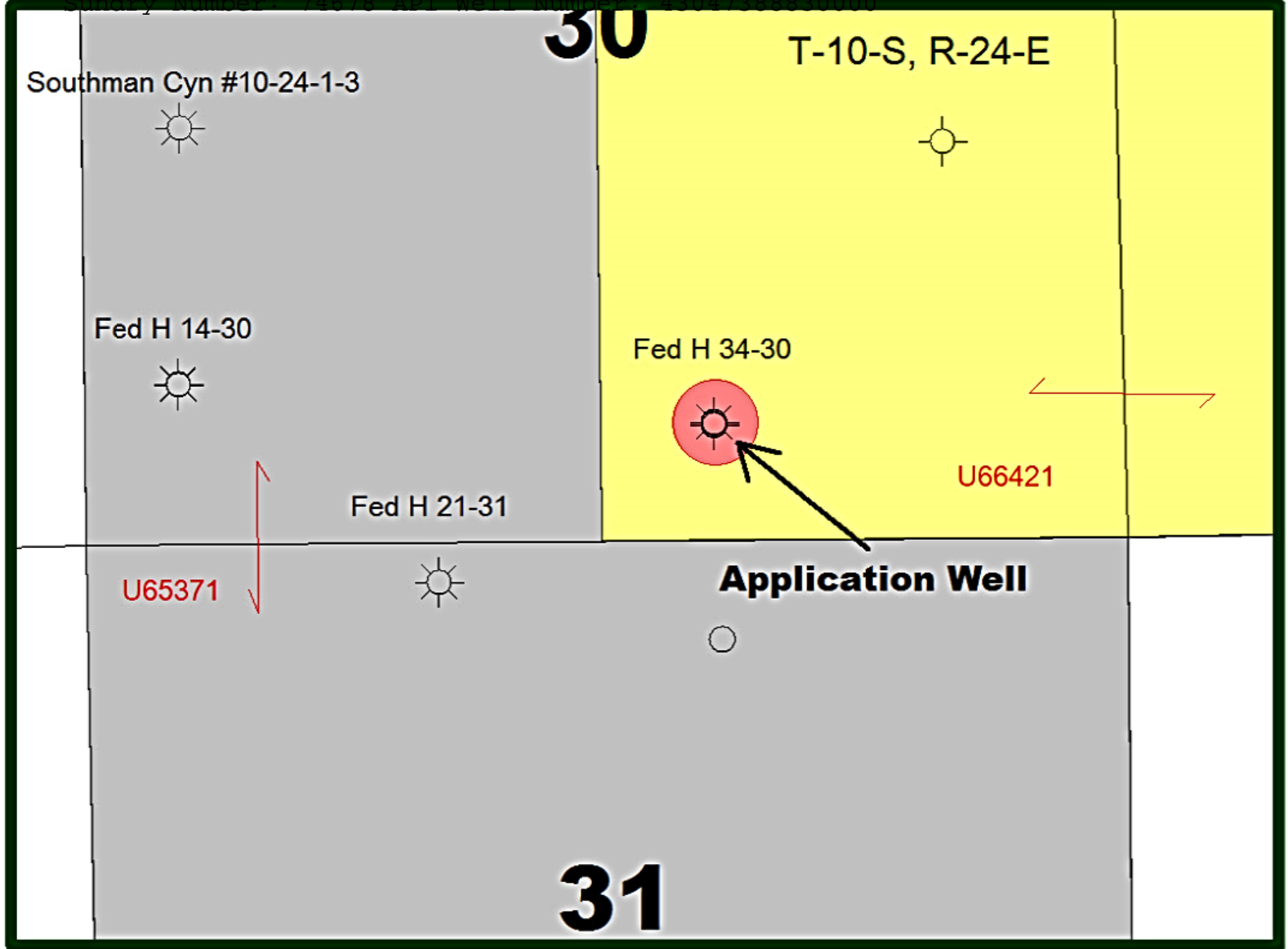
Diamondback Oil Partners, LLP  
5990 Kipling Pkwy, #201  
Arvada, CO 80004

XTO Energy, Inc.  
810 Houston Street, #2000  
Fort Worth, TX 76102

Cross Timber Energy, LLC  
400 W 7<sup>th</sup> Street  
Fort Worth, TX 76102

Enduring Resources II, LLC  
511 16<sup>th</sup> Street, #700  
Denver, CO 80202





500 0 500 1000 1500 ft

1:11000

**Summit Operating LLC**

**Asphalt Wash Gas Field**

**Uintah County, Utah**

**Commingling Application For: Fed H 34-30**

## AFFIDAVIT OF MAILING

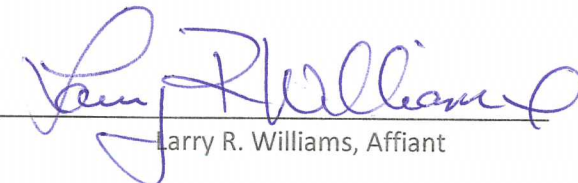
STATE OF UTAH            }  
                                  } ss.  
County of Utah            }

COMES NOW, Larry R. Williams, (hereinafter referred to as "Affiant"), being first duly sworn upon oath and deposes and says the following:

1. Affiant is a citizen of the United States of America, is over 21 years of age, currently resides in Salt Lake County, Utah, is the Land Manager and Corporate Counsel for Summit Operating, LLC (hereafter referred to as "Summit") and has personal knowledge of the facts set forth herein;
2. Summit is the Operator of the Fed H 34-30 Well which is located in the Southwest Quarter of the Southeast Quarter of Section 30, Township 10 South, Range 24 East, Uintah County, Utah.
3. Exhibit A, which is attached hereto and made a part hereof, is a map showing the location of wells located on contiguous oil and gas leases and/or drilling units in relation to the Fed H 34-30 Well. A search of the applicable records has revealed that the parties listed on Exhibit B, which is attached hereto and made a part hereof, are the only interest owners of the contiguous oil and gas leases, or the contiguous drilling units overlying the pool.
4. On September 27, 2016 Affiant mailed, or caused to be mailed, in the U.S. Mail, with postage prepaid, a copy of the attached Application for Commingling two or more pools (formations) in one well bore of the well described in Paragraph 2 above which is has been or is being filed with the State of Utah Division of Oil, Gas and Mining to each of the owners listed on Exhibit B.

Further the Affiant sayeth not.

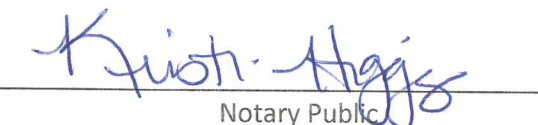
Dated: September 27, 2016

  
Larry R. Williams, Affiant

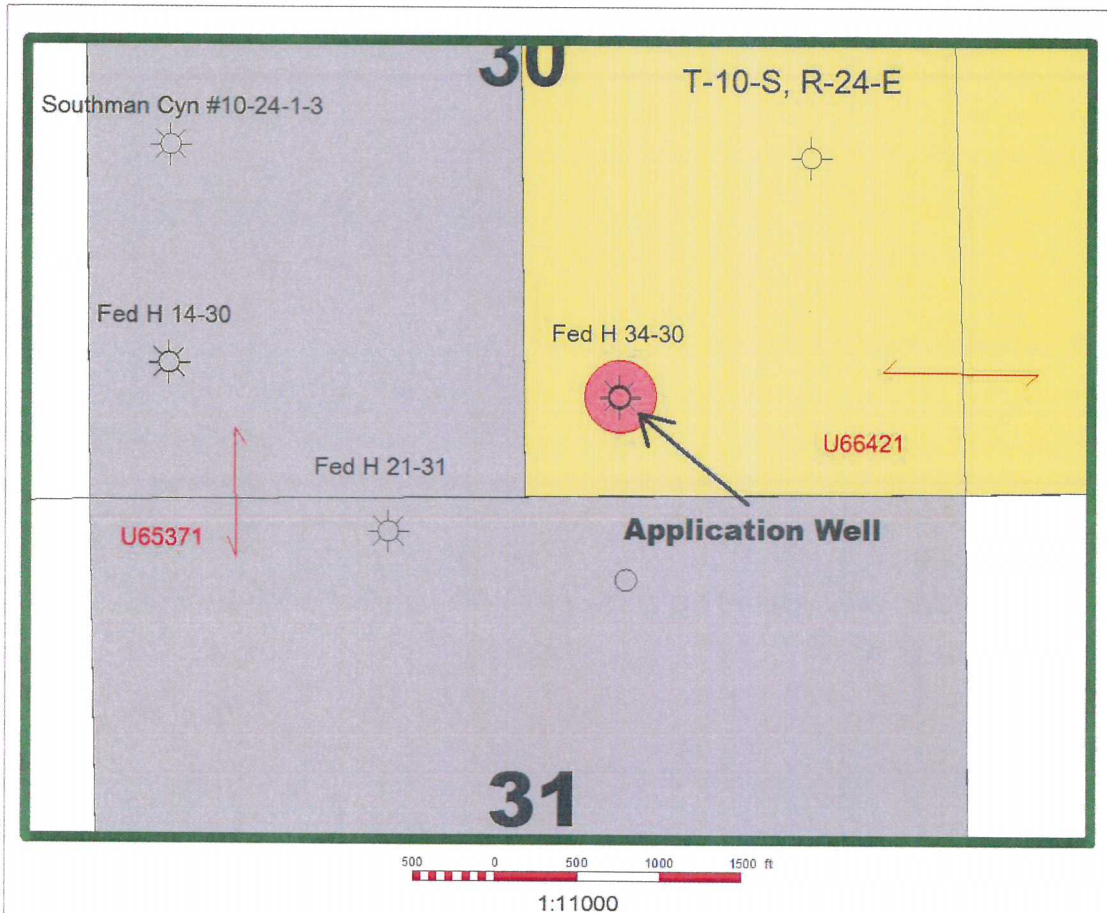
### JURAT

Subscribed to and sworn before me this 27<sup>th</sup> day of September, 2016.



  
Notary Public

## EXHIBIT A



**Summit Operating LLC**

**Asphalt Wash Gas Field**

**Uintah County, Utah**

**Commingling Application For: Fed H 34-30**

## EXHIBIT B

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### CONTIGUOUS LEASE OR DRILLING UNIT OWNERS

SEP – Rockhouse, LLC  
531 E 770 N  
Orem, UT 84097

Diamondback Oil Partners, LLP  
5990 Kipling Pkwy, #201  
Arvada, CO 80004

XTO Energy, Inc.  
810 Houston Street, #2000  
Fort Worth, TX 76102

Cross Timber Energy, LLC  
400 W 7<sup>th</sup> Street  
Fort Worth, TX 76102

Enduring Resources II, LLC  
511 16<sup>th</sup> Street, #700  
Denver, CO 80202